ARCHGARD
FIREPLACE PRODUCTS

Optima 70 - 2

Gas Fired Vented Room Heater (Direct Vent)

For use with natural gas or propane*

WARNING: If the information in this manual is not followed exactly, fire or explosion may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

* Do not try to light any appliance.
* Do not touch any electrical switch; do not use any phone in your building.
* Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
* If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Users' Installation Operation and Maintenance Manual

This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

*Conversion kit required for Propane use

Installer: Please leave this manual with the appliance owner for future reference

ARCHGARD
LIFETIME LIMITED WARRANTY

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Mission, BC V2V 6B4
Canada

200-0162

March 2007

5.08: **Modifications to NFPA-54, Chapter 10**

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, **"GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".**

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

For the State of Massachusetts, installation and repair must be done by a plumber or gasfitter licensed in the Commonwealth of Massachusetts.

For the State of Massachusetts, flexible connectors shall not exceed 36 inches in length.

The State of Massachusetts requires the installation of a carbon monoxide alarm in accordance with NFPA 720 and a CO alarm with battery back up in the same room where the gas appliance is installed.

For the State of Massachusetts the appliances individual shut – off must be a t-handle type valve.

INTRODUCTION

Congratulations on choosing an Archgard fireplace!

The Optima 70 is one of the most advanced direct vent fireplace heaters available. It is solidly designed using the latest technology and manufactured to the highest quality. It is our aim to provide you with an appliance with many trouble free years of reliable service.

The following are just some of the many features within your new gas fireplace:

- Heater Classification. The Optima 70 is classified as a heating appliance. In conjunction with an optional thermostat, the Optima 70 can be operated continuously for zone heating.
- High Efficiency. The Optima 70 has one of the highest efficiencies of any gas fireplace, which means that it is less expensive to operate.
- Adjustable Fan Speed. Heat circulation fan can be fully adjusted from high, medium or low speeds to suit your comfort level.
- Adjustable Flame. The flame aesthetics and heat output can be adjusted to suit your heating needs.
- Solid Construction. The Optima 70 is constructed mainly of 14 and 18 gauge galvanized and aluminized steel for long life and durability.
- Millivolt Control System. The gas control system is “thermostat” ready for any optional millivolt wall thermostat or wireless remote control.

Please read the manual carefully prior to installation and operation of the appliance. Proper installation, operation and maintenance of the appliance will provide you with many years of enjoyment. We recommend you record the following information:

Fireplace Model Number _____

Fireplace Serial Number _____

Date of Installation _____

Type of Gas Used by the Fireplace _____

Dealer’s Name _____

_____

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CAUTION

FOR YOUR SAFETY - Do not install or operate your Archgard Optima 70 Direct Vent Gas Fireplace without reading and understanding this manual. Any installation or operational deviation from this instruction manual voids the Archgard Industries Warranty and may prove hazardous.

This appliance must be installed by a qualified gas installer and the installation must conform to the installation codes.

Provide adequate clearance around air openings of the appliance.

Never obstruct front openings.

Provide adequate clearances for proper operation and servicing of the appliance.

This appliance must be properly connected to an approved venting system and must not be connected to a chimney flue serving a separate solid fuel burning appliance.

SAFETY

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperature and stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the appliance.

Clothing or other flammable material should not be placed on or near the appliance.

Do not operate with cracked or broken glass. Be careful not to strike or slam the glass.

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating.

Installation and Repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that the control compartments, burners and circulating air passageways of the appliance are kept clean.

APPLIANCE CERTIFICATION

This appliance is tested and safety approved under the following US and Canadian gas appliance standards:

- ANSI Z21.88-2002/CSA 2.33-2002, Vented Gas Fireplace Heaters,
- CAN/CGA-2.17-M91, Gas-Fired Appliances for Use at High Altitudes

Please contact Archgard Industries Ltd., if you have any questions regarding the certification of this appliance.

INSTALLATION CODES

This appliance must be installed by a qualified gas appliance installer.
The installation must conform with the local codes or, in the absence of local codes, with the current National Fuel Gas Code, ANSI Z223.1/ NFPA 54, in the US or Installation Code, CAN/ CGA-B149, in Canada. Electrical connections and grounding must conform with local code, or current National Electrical code, ANSI/NFPA No. 70-1987, in the US and in Canada, the current Canadian Electrical Code, CSA C22.1.

SPECIFICATIONS

	Natural Gas (NG)	Propane (LP)
Manifold Pressure	1.6 - 3.5 in. W.C. (0.4 - 0.9 kpa)	6.3-10.0 in. W.C. (1.6 - 2.5 kPa)
Min. Supply Pressure **Max Supply Pressure**	4.5 in. w.c. (1.2 kPa) 14.0 in. w.c. (3.5 kPa)	11.0 in. w.c. (2.8 kPa) 14.0 in. w.c. (3.5 kPa)
Orifice Size	#37 DMS (2.65 mm dia.)	#52 DMS (1.62 mm dia.)
Nominal Input Rating	20,100 - 30,000 BTU/hr (5.9 - 8.8 kW)	23,000 - 30,000 BTU/hr (6.7 - 8.8 kW)
Output (Fan On) @ Max. Rating	22,500 BTU/hr (6.6 kW)	23,100 BTU/hr (6.8 kW)
Output (Fan Off) @ Max. Rating	22,500 BTU/hr (6.6 kW)	23,100 BTU/hr (6.8 kW)
Altitude	0-4500 ft (0 - 1372 M)	0 - 4500 ft (0 - 1372 M)
Primary Air Opening	FULLY OPEN	FULLY OPEN

HIGH ALTITUDE INSTALLATION

When installing this appliance beyond 4500 ft. (1372m) above sea level, the appliance must be properly de-rated and installed according to local codes, in the absence of local codes, with the current National Fuel Gas Code, ANSI Z223.1/ NFPA 54, in the US or Installation Code, CAN/ CGA-B149, in Canada.

GAS CONNECTIONS

Before connecting the appliance to the gas supply line, double check that the appliance you have purchased is designed for the gas type you are using. The gas type markings are located on the certification label and also on the appliance's gas valve.

Adequate clearance for proper installation and checking of the gas connections must be provided. **All gas connections must be checked for gas leaks.**

Have your gas supplier or a qualified gas fitter run a gas supply line into the fireplace. The line must be properly sized and fitted according to the installation codes. Immediately upstream of the supply connection, the fitter shall provide an accessible manual shut-off valve and a 1/8" (3mm) NPT plugged tapping accessible for connection to a test gauge. When connecting the supply line to the gas valve, the installer shall brace the gas valve to ensure that gas valve is not moved from its bracket. If the valve is not braced when the supply line is connected, the valve may be moved and cause a "break" in the main burner supply line. Such damage is not covered by the manufacturer's warranty.

CAUTION: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test-pressures in excess of 1/2 psig (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure-testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa). Failure to do so will damage the appliance's gas valve. Such damage is not covered by the manufacturer's warranty.

Natural Gas Pressure Settings:
The inlet supply or line pressure must be a minimum of 4.5" W.C. (1.1 kPa) and a maximum of 14 W.C. (3.5 kPa). The orifice is a #37 DMS (2.64 mm) drill size.

ELEVATION	INPUT RATING
0-4500 ft (0-1372 M)	30,000 BTU/hr (8.8 kW)
4500 ft (1372 M) and above.	30,000 BTU/hr (8.8 kW) less 4% per 1000 ft. (305 M)

Please contact your local distributor for the appropriate orifice size you require.

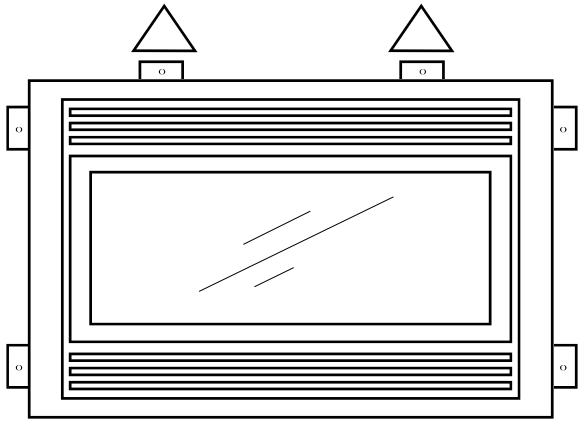
Propane Pressure Settings:
The inlet supply or line pressure must be a minimum of 11" W.C. (2.8 kPa) and a maximum of 14" W.C. (3.5 kPa). The orifice is a #51 DMS (1.70 mm) drill size.

ELEVATION	INPUT RATING
0-4500 ft. (0-1372 M)	30,000 BTU/hr (8.8 kW)
4500 ft. (1372 M) and above.	30,000 BTU/hr (8.8 kW) less 4% per 1000 ft. (305 M)

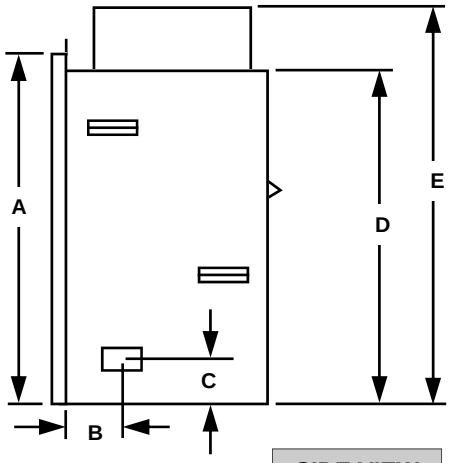
Please contact your local distributor for the appropriate orifice size you require

NOTE: THE INPUT RATING SHOULD ALWAYS BE CHECKED WHEN FIRST RUNNING THIS APPLIANCE. To do this, reduce the background flow rate, time the meter, light the fireplace and take another reading after 15 minutes of operation. Check with your gas supplier for the gas BTU content at your elevation. Input is the rate of flow multiplied by the heating value of the gas (cubic feet/hour x BTU per cubic feet). Adjust the manifold pressure so that the unit does not operate above the rated input.

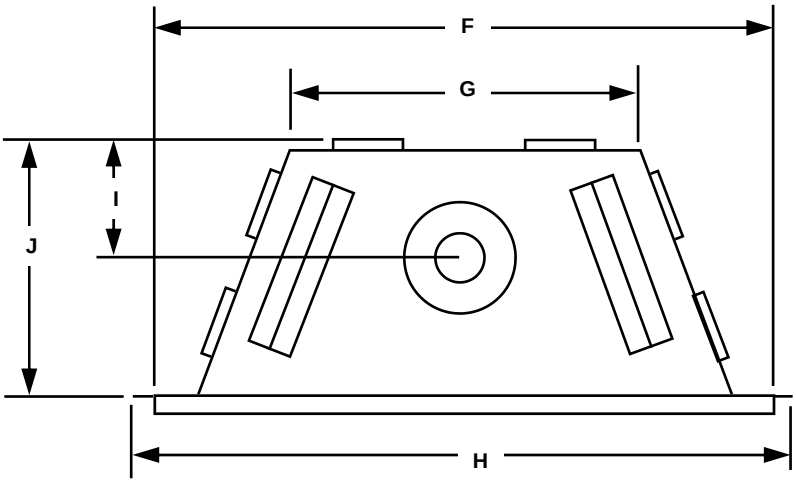
APPLIANCE DIMENSIONS



FRONT VIEW



SIDE VIEW



TOP VIEW

	DIMENSIONS
A	31” (787 mm)
B	6” (152 mm)
C	3” (76 mm)
D	29 ¾” (756 mm)
E	38” (965 mm)
F	38” (965 mm)
G	21 ½” (545 mm)
H	39 ¾” (1010 mm)
I	6 ½” (164 mm)
J	16 ¼” (412 mm)

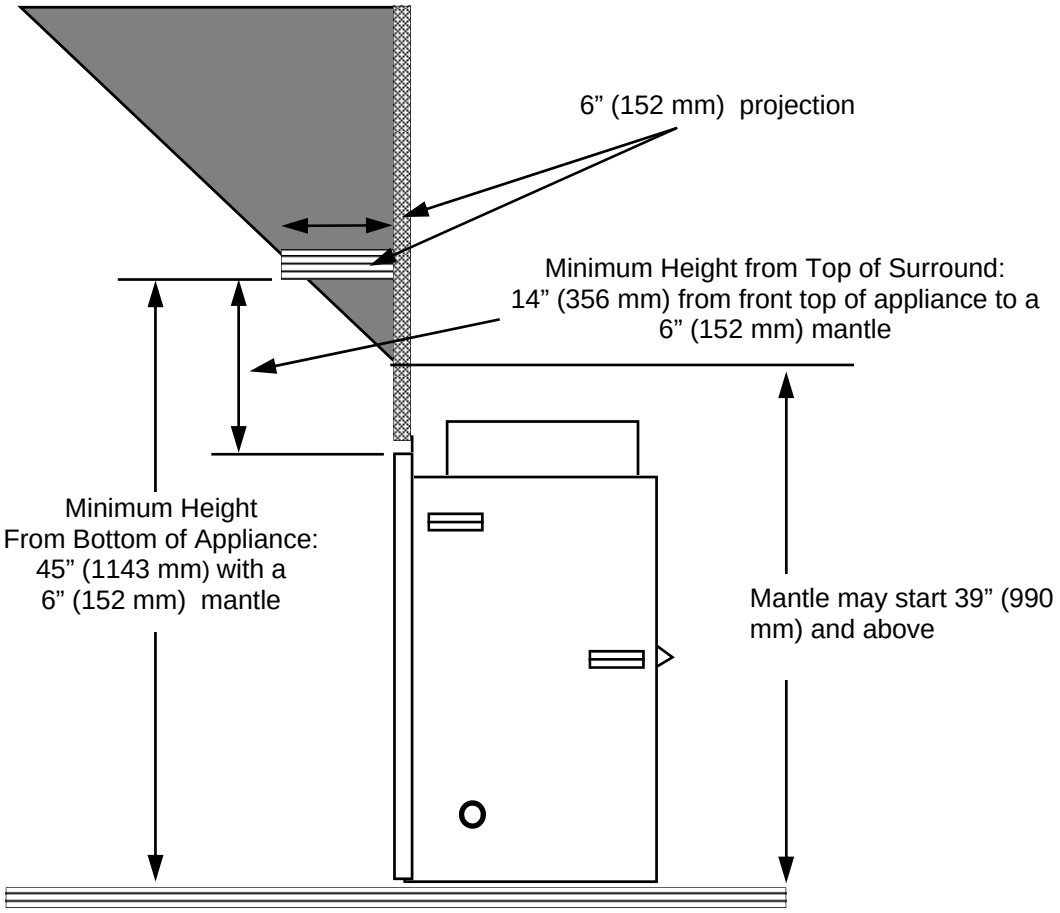
CLEARANCES TO COMBUSTIBLES

BACK	0” to stand-offs
SIDES	0” to stand-offs
TOP	0” to stand-offs
BOTTOM	0”
ADJACENT SIDE WALL	1” (25 mm) to side of faceplate
MANTLE	see diagram
VENT	1” (25 mm) to outside side and bottom surface, 2” (50 mm) to outside top surface.

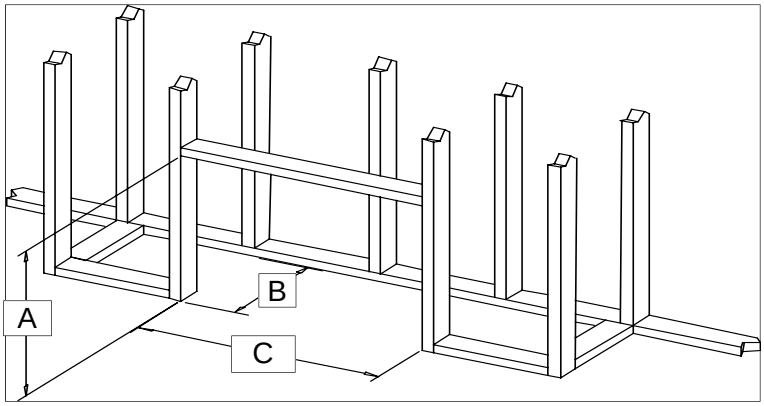
MANTLE CLEARANCE

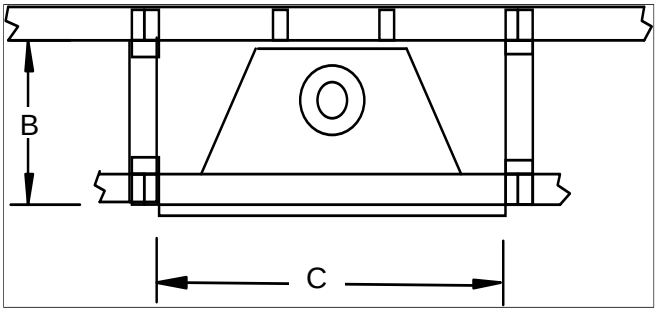
NOTE:
Low profile wooden crowns and moldings above the unit are not considered as mantles.
I.E. 1” (25 mm) or less protrusions on the upper mantle facing are acceptable.

Combustible mantle allowed in shaded area. Mantle extension may be increased 1” (25 mm) for each additional 1” (25 mm) increase in clearance height.


6” (152 mm) projection
Minimum Height from Top of Surround:
14” (356 mm) from front top of appliance to a
6” (152 mm) mantle
Minimum Height
From Bottom of Appliance:
45” (1143 mm) with a
6” (152 mm) mantle
Mantle may start 39” (990
mm) and above

FRAMING DIMENSIONS

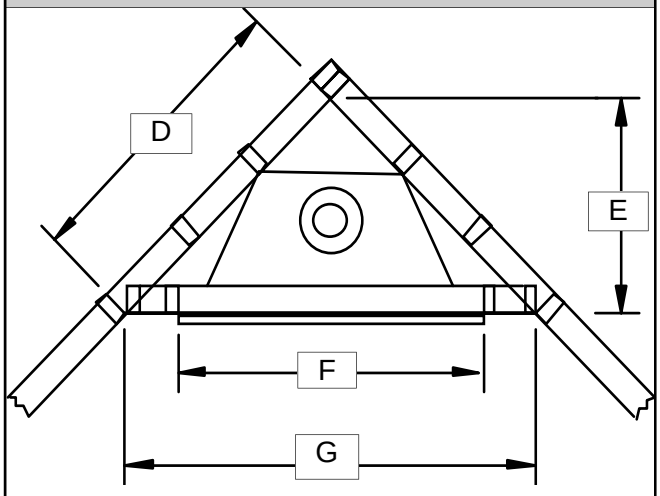




	Dimensions
A	* 38” (965 mm)
B	16-1/4” (412 mm)
C	38” (965 mm)

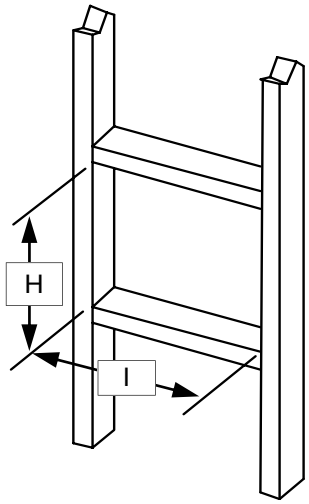
* This dimension allows the top of the fireplace to slide under. If more rigidity is required, a stud may be added to the back of the fireplace top nailing flange after the fireplace is installed.

CORNER FRAMING



	DIMENSIONS
D	39-1/8”” (994 mm)
E	27-5/8”” (700 mm)
F	37-3/4” (959 mm)
G	55-1/4” (1403 mm)

TERMINATION FRAMING

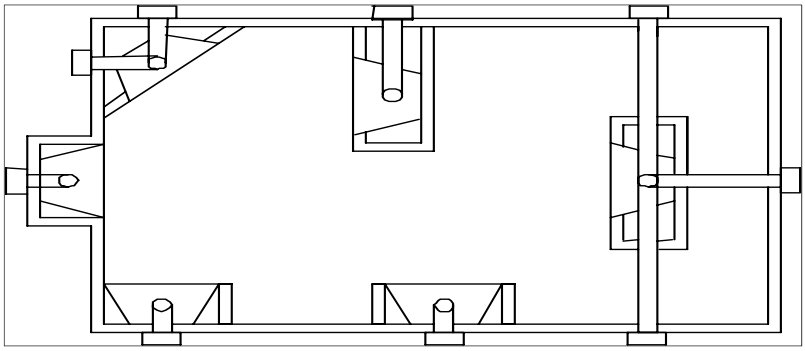


	DIMENSIONS
H	11” (279 mm)
I	10” (254 mm)

NOTE: Be sure to include 1/4” (6 mm) rise per 12” (305 mm) of horizontal length

LOCATING GAS FIREPLACE

This appliance must be installed in any location that is free of plumbing, electrical wiring and heating or air conditioning ducts. Select a location that is accessible for venting.
See ALLOWABLE TERMINATION LOCATIONS listed in this manual.

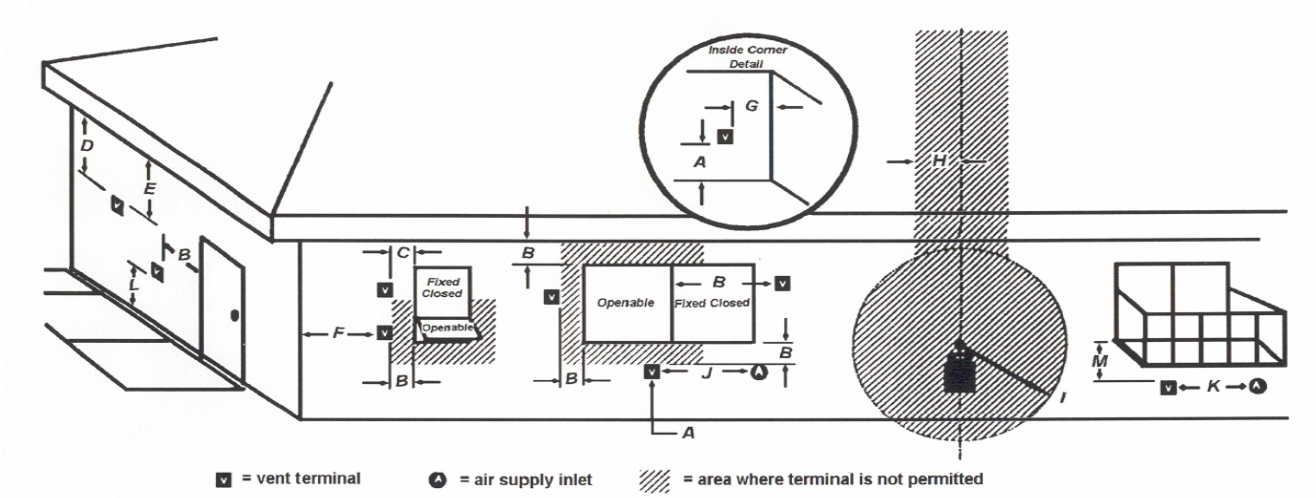


NOTE:
See venting chart for maximum and minimum vertical/horizontal venting configurations.

VENT TERMINATION LOCATIONS

1. See ALLOWABLE TERMINATION LOCATIONS and establish a suitable vent termination location.
2. In heavy snowfall areas make sure the vent termination is located where it can not be blocked by snowfall and snow and from snow-removal equipment.
3. Locate the vent termination away from plants, bushes or any other object near the vent termination that will interfere or obstruct the air flow around it.
4. DO NOT recess vent termination into walls, sidings or planters.
5. Vent terminations located below 7ft (2.13 M) from grade level or anywhere that it can be a burn hazard to the public, such as patios and balconies, must be protected with an approved termination cage. If using Archgard Venting System order (Part # C-1).

The fireplace may be installed in any location that maintains proper clearances to combustibles, air conditioning ducts, electrical wiring and plumbing. Select a location that is accessible for venting See section Allowable Termination Locations listed in this manual. When the appliance is installed directly on carpeting, vinyl tile or other combustible materials, other than wood flooring, the appliance must be installed on metal or wood panel extending the full width and depth of the appliance.



	Canadian Installations (1)	US Installations (2)		Canadian Installations (1)	US Installations (2)
A= Clearance above grade, veranda, porch, deck, or balcony	12 inches (30 cm)	12 inches (30 cm)	J= Clearance to non-mechanical air supply inlet to building or the combustion air inlet o any other appliance	12 inches (30 cm)	9 inches (23 cm)
B= Clearance to window or door that may be opened	12 inches (30 cm)	12 inches (30 cm)	K= Clearance to a mechanical air supply inlet	6 feet (1.83 m)	3 feet (91 cm) above if within 10 feet (3 m) horizontally
C= Clearance to permanently closed window	*	*	L= Clearance above paved sidewalk or paved driveway located on public property	7 feet (2.13 m) +	*
D= Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal	*	*	M= Clearance under veranda, porch, deck, or balcony	12 inches (30 cm) ++	*
E= Clearance to unventilated soffit	*	*			
F= Clearance to outside corner	*	*			
G= Clearance to inside corner	*	*			
H= Clearance to each side of center line extended above meter/regulator assembly	3 feet (91 cm) within a height 15 feet (4.5 m) above the meter/regulator assembly	*			
L= Clearance to service regulator vent outlet	3 feet (91 cm)	*			

(1) In accordance with the current CSA B149.1, *National Gas and Propane Installation Code*
(2) In accordance with the current ANSI Z223.1/NFPA 54, *National Fuel Gas Code*
(+) A vent shall not terminate directly above a side walk or paved driveway that is located between two single family dwellings and serves both dwellings
(++) Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.
(*) For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, "Clearances shall be in accordance with local installation codes and the requirements of the gas supplier."

APPROVED VENT COMPONENTS

The appliance will not function without being connected to a proper venting system.
This appliance may only use direct vent system supplied by Archgard, or Simpson Dura-Vent direct vent systems with the appropriate adaptor dependent upon the venting guidelines within this manual.

NOTE: Only venting components listed below are approved for the Optima 70

PART #	DESCRIPTION
TVK-1	Archgard Flex Vent Kit with 36" (914 mm) vent length (includes TK-1)
TVK-2	Archgard Flex Vent Kit with 60" (1.52 M) vent length (includes TK-1)
TK-1	Archgard Horizontal termination head only
C-1	Archgard Safety Cage for Horizontal termination head (TK-1)
VSD-1	Archgard Vinyl siding deflector
SDA-1	Adapter, Flex to Simpson Dura-Vent
SDA-3	Adapter, Appliance to Simpson Dura-Vent
DV-GS	Simpson Dura-Vent venting system

VENTING CONNECTION

For best and safe venting performance, here are some general venting rules:

- Use only Archgard or Simpson Dura-Vent direct vent systems and components.
- **Maintain a minimum of 1" (25mm) clearance to combustibles from the outside surfaces of vertical vents and minimum of 1" (25mm) sides and bottom, and 2" (50mm) from top surfaces of horizontal vents.**
- Observe any local code restrictions, if any, regarding the installation of this type of gas appliance.
- **Observe the venting charts given in this manual.**
- Use vent spacers between the inside 4" (101mm) and outside 7" (178mm) vents at every 3 ft (915mm) intervals (Archgard Direct Vent System ONLY).
- **Never slope horizontal vents downwards, towards the vent termination.**
- **Maintain a minimum 1/4" rise (6mm) for every linear foot (305mm) of horizontal vent.**
- Terminate (Horizontally) the vent only with an approved vent termination supplied by Archgard Part # TK-1 or Simpson Dura-Vent Termination Cap.
- Terminate (Vertically) the vent only with Simpson Dura-Vent Vertical Termination Cap.
- **Support horizontal vents every 3 ft (914 mm) to prevent sagging**.

Please strictly follow the venting instructions for optimum performance from the appliance and to avoid sooting and / or service calls.

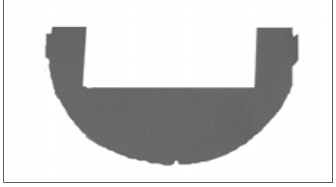
VENTING - RESTRICTOR PLACEMENT

RESTRICTOR PLACEMENT FOR ROOFTOP VENTED APPLICATIONS ONLY

WARNING: These restrictors are only to be installed in the vent system if the vent exceeds 10' in vertical height. Restrictor Number 1 below is required if the vent system is between 10'-18' and Restrictor Number 2 below is required if the vent system exceeds 18'. **Installing them under any other circumstances may cause hazardous venting conditions and may result in personal injury, property damage or death.**

NOT FOR USE IN SIDEWALL VENTED APPLICATIONS

Restrictor Number #1
Rooftop Venting Above Ten Feet (10')



Restrictor Number #2
Rooftop Venting Above Eighteen Feet (18')

NOTE: Vent restrictors are designed to reduce vertical stack action for vent terminations which will reduce the velocity of incoming combustion air and not adversely affect the standing pilot or the efficiency of the appliance.

Simpson Dura-Vent
With Simpson Dura-Vent, locate the restrictor in the exhaust section fitting into the formed lip.

Simpson Dura-Vent

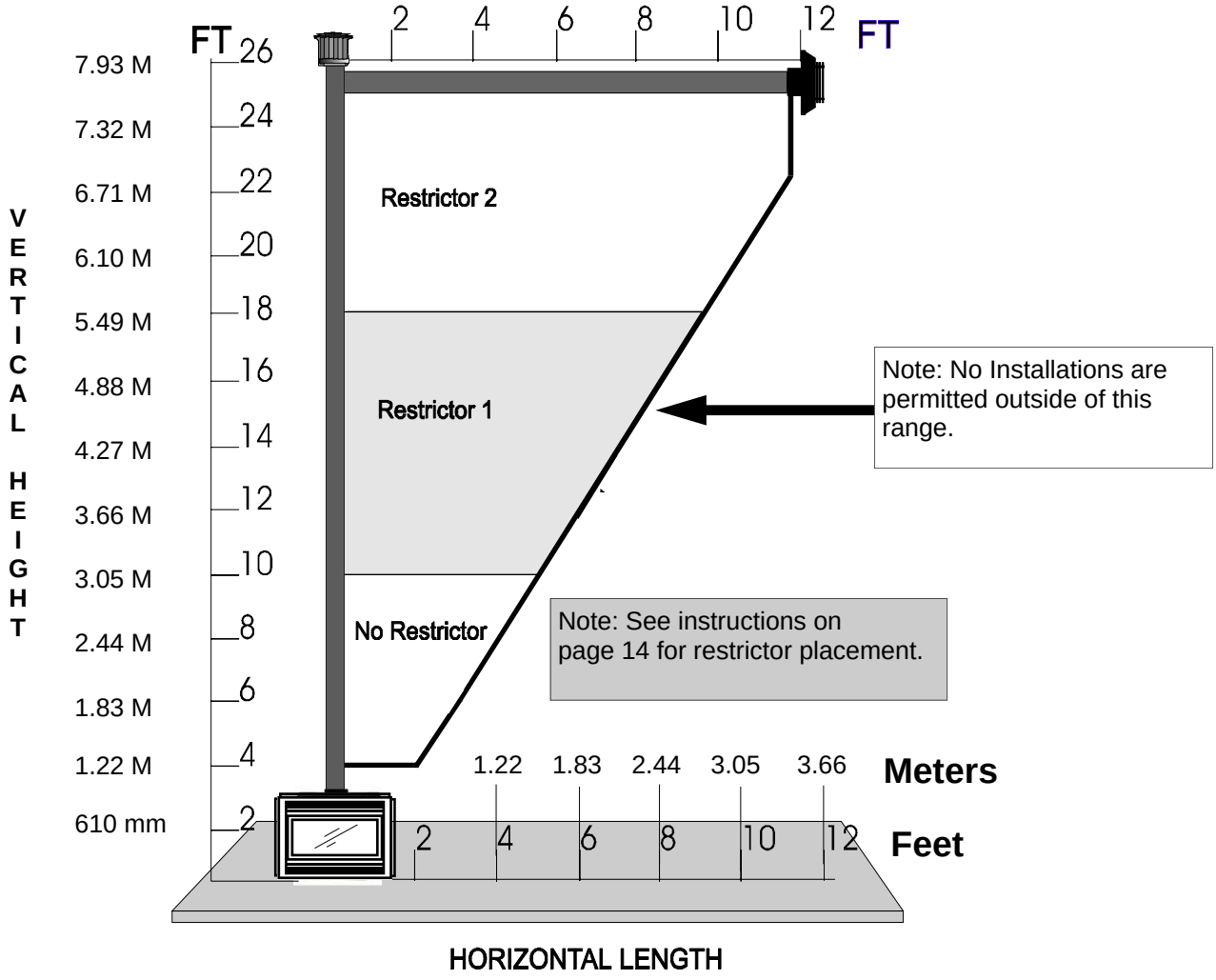
Archgard System
In the Archgard system, the restrictors are placed on the exhaust outlet on the appliance.

Archgard System

VENTING - VERTICAL TERMINATION CHART

The appliance will not function without being connected to a proper venting system. This appliance may only use direct vent system supplied by Archgard, or Simpson Dura-Vent direct vent systems with Archgard SDK-3 adapter.

VENTING CHART



- Chart is for one 90° bend, **with a 1/4" (6 mm) minimum vertical rise per running foot** of horizontal length.
- For each additional 90° or two 45°, add one foot of vertical height.
- Maximum three 90º bends, or equivalent allowed in the system.
- Minimum 2 ft (610 mm) straight length between bends.

VENTING ABOVE ROOF OF THE HOUSE USING A VERTICAL TERMINATION

Use Simpson Dura-Vent listed direct vent system caps for all vertical vent termination applications (through the roof).

Please strictly follow the venting instructions for optimum performance from the appliance and to avoid sooting and/or service calls.

VENTING - VERTICAL TERMINATION USING SIMPSON DURA-VENT PIPE ONLY

The Optima 70 can be vented vertically using Simpson Dura-Vent Direct Vent System. To vent using Simpson Dura-Vent exclusively, you must use the Archgard SDA-3 Adaptor and connect the (SDA-3) adaptor to the top of flue outlet on the Optima 70 gas fireplace.

1. Maintain 1" (25mm) clearance (air space) to combustibles when passing through ceilings, walls, roof, enclosures, attic rafter, or other nearby combustible surfaces. Do not pack air spaces with insulation. Check **page 15** (Venting Chart) for the maximum vertical rise of the venting system.
2. Set the gas appliance in its desired location. Drop a plum bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, and mark the spot where the vent will penetrate the roof. **NOTE:** you may wish to relocate the appliance to avoid cutting load-bearing members.
3. A Firestop spacer must be installed in the floor or ceiling of every level. To install the Firestop spacer in a flat ceiling cut a 10" (254mm) square hole. Frame the hole as shown Fig. 1. and install the firestop.
4. Assemble the desired lengths of pipe and elbows as outlined in the Venting Chart, necessary to reach from the Appliance adaptor (SDA-3). Ensure that all Simpson Dura-Vent and/or flexible gas liners are connected and sealed accordingly.
5. Cut a hole in the roof centered on the small drill hole placed in the roof as outlined in Step 2.
6. The hole should be of sufficient size to meet the minimum requirements for each combustibles of 1" (25mm). Slip the flashing under the shingles (shingles should overlap half of the flashing) as per Fig.2.
7. Continue to assemble pipe lengths and/or flexible gas venting.
8. Ensure vent is vertical and secure the base of the flashing to the roof with roofing nails; slide storm collar over the section and seal with a mastic.
9. Install the vertical termination cap by twist-locking it.

NOTE:

- Apply high temperature sealant to inner and outer pipe on every Simpson Dura-Vent twist-lock joint. See Fig. 3.

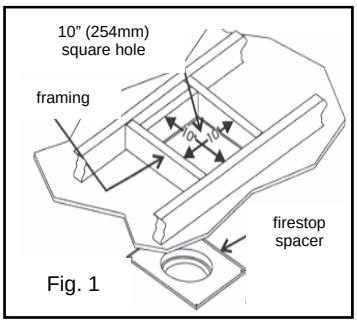


Fig. 1

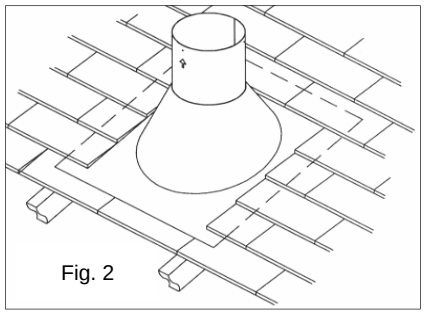


Fig. 2

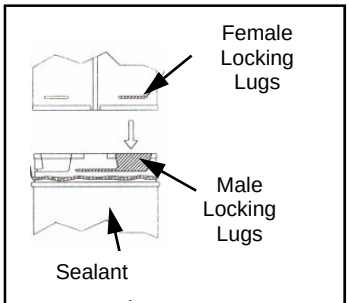


Fig. 3

VENTING - VERTICAL TERMINATION USING SIMPSON DURA-VENT PIPE ONLY

NOTE:

- Galvanized pipe is desirable above the roof-line due to its higher corrosion resistance. Continue to add pipe sections throughout the flashing until the height of the vent cap meets the minimum height requirements specified in Fig. 5. or local codes.
- For steep roof pitches, the vertical height must be increased. A poor draft, or down drafting can result in high wind conditions, trees or neighbor's roof lines. In these cases increasing the height may solve a drafting problem. REMEMBER to check that you are within the maximum vertical height restrictions, and are placing the appropriate vent restrictors as outlined in the venting chart within this manual.
- Any storage spaces or closets which the vent must pass through must be enclosed.

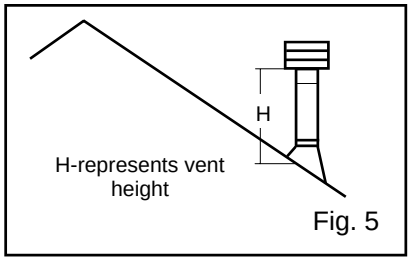
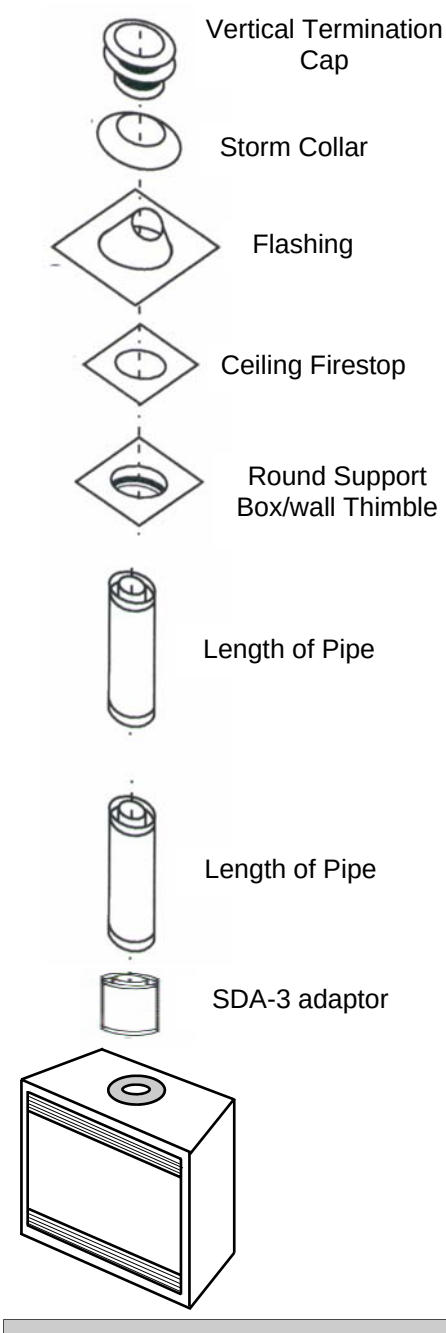


Fig. 5

Roof Pitch	Minimum Vent Height	
Flat to 7/12	2 Feet	0.61 Meters
Over 7/12-8/12	2 Feet	0.61 Meters
Over 8/12-9/12	2 feet	0.61 Meters
Over 9/12-10/12	2.5 Feet	0.76 Meters
Over 10/12-11/12	3.25 Feet	1.00 Meters
Over 11/12-12/12	4 Feet	1.22 Meters
Over 12/12-14/12	5 Feet	1.52 Meters
Over 14/12-16/12	6 Feet	1.83 Meters
Over 16/12-18/12	7 Feet	2.13 Meters
Over 18/12-20/12	7.5 Feet	2.29 Meters
Over 20/12-21/12	8 Feet	2.44 Meters

Typical Vertical venting configuration using Simpson Dura-Vent Direct Vent System



Simpson Dura-Vent venting components are listed on page 22

VENTING - VERTICAL TERMINATION using FLEX GAS LINER

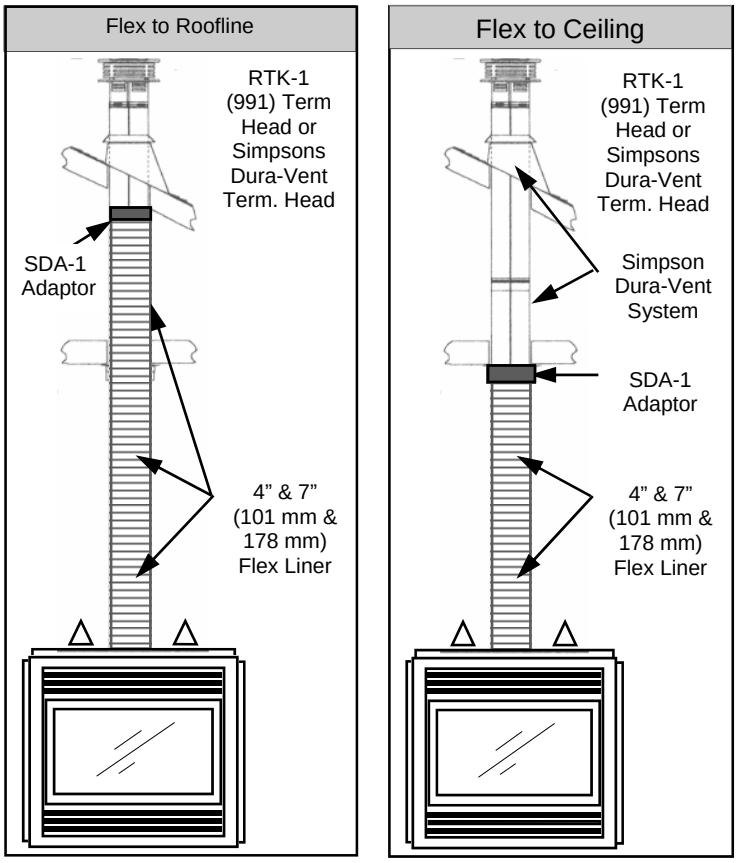
The Optima 70 can be used with flexible 4" & 7" (101mm & 178mm) gas liner, and terminate through the roof using Simpson Dura-Vent by using an SDA-1 (Adaptor, Flex to Simpson Dura-Vent).

- Refer to the venting chart before considering vertical termination.
- Check the Allowable Termination Locations chart within this manual.

CONNECTING THE SDA-1 ADAPTOR TO FLEX & SIMPSON DURA-VENT

FLEXIBLE PIPE CONNECTIONS

1. The intake pipe shall be securely fastened to the appliance and to the terminal and all joints shall be secured using a minimum of 3 screws evenly spaced around the pipe.
2. Approximately 1" (25mm)from the end of the 4" (101mm) pipe outlet at the appliance and at the 4" (101mm) terminal inlet apply a bead of high temperature silicone approximately 1/4" (6mm) wide. Slide the 4" (101mm) pipe onto the appliance and secure with 3 screws evenly spaced to the outlet. Repeat the procedure at the terminal inlet.
3. Install a vent spacer between the outer and the inner liner to maintain clearances. Spacers shall be installed at every change of direction and every 3" (76mm).
4. See Fig. 1 & 2 to determine where to place the SDA-1 adaptor, and connect the SDA-1 adaptor as shown in Fig. 3.
5. Follow all vertical venting directions as outlined in the Vertical termination sections.


Flex to Roofline
RTK-1 (991) Term Head or Simpsons Dura-Vent Term. Head
SDA-1 Adaptor
4" & 7" (101 mm & 178 mm) Flex Liner
Flex to Ceiling
RTK-1 (991) Term Head or Simpsons Dura-Vent Term. Head
Simpson Dura-Vent System
SDA-1 Adaptor
4" & 7" (101 mm & 178 mm) Flex Liner

Connecting the SDA-1 Adaptor

Slide the 4" (101mm) flex pipe over the 4" (101mm) section of the SDA-1 Adaptor, and secure with a bead of high temperature silicone and three screws. Repeat the process for the 7" (178mm) liner. Follow with Simpson Dura-Vent Pipe and guidelines for installation as outlined within this manual

Clearance to combustible material and fire-stops shall be installed as required by local codes and in the absence of local codes, in accordance with the local enforcing authority.

VENTING - HORIZONTALLY USING FLEXIBLE DIRECT VENT SYSTEMS

The Optima 70 can be vented Horizontally by using the Archgard Direct Vent System of flexible pipe

PART #	DESCRIPTION
TVK-1	Flex Vent Kit with 36” (914 mm) vent length (includes TK-1)
TVK-2	Flex Vent Kit with 60” (1.52 M) vent length (includes TK-1)
TK-1	Horizontal termination head only
C-1	Safety Cage for Horizontal termination head (TK-1)
VSD-1	Vinyl siding deflector

VENT KIT COMPONENTS (TVK-1)

7” (mm) & 4” (100mm) flexible liner (compressed)

Sleeve

Firestop

Screws

Sealant

Horizontal Termination Cap

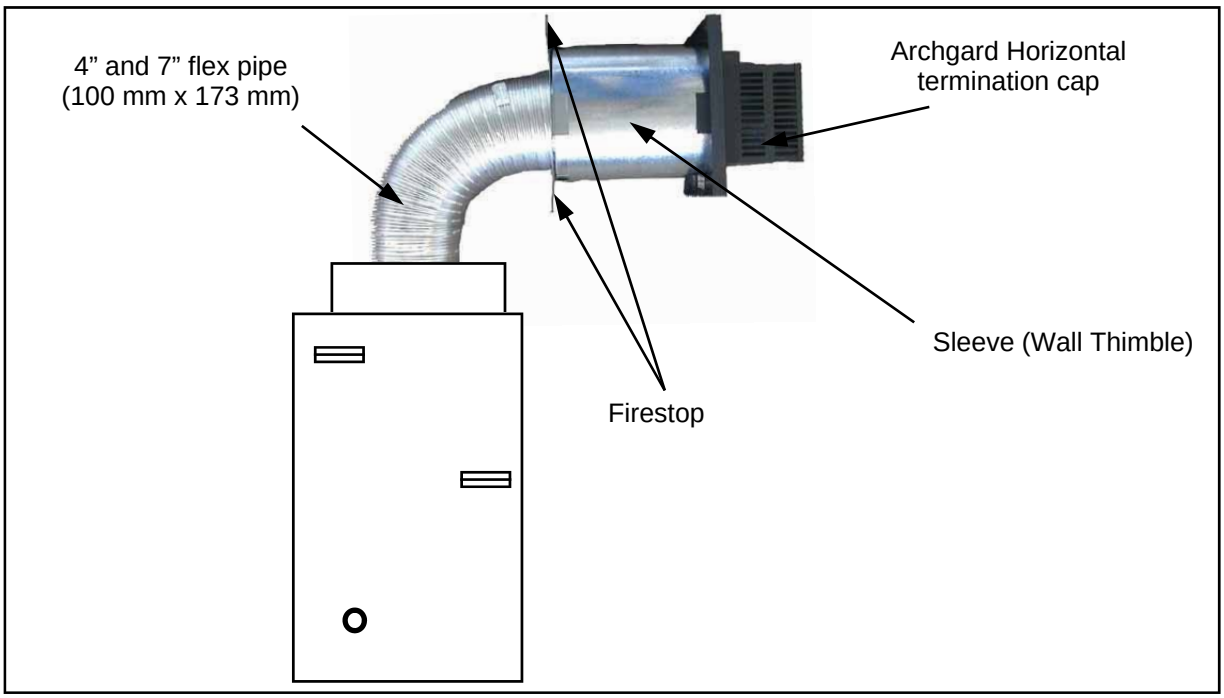
Spring spacers

VENT ASSEMBLY

4” exhaust vent with spring spacers

Fully assembled Flexible Direct Vent System

NOTE: Pitch the flexible pipe up towards the Horizontal Termination Cap



VENTING - HORIZONTALLY USING FLEXIBLE DIRECT VENT SYSTEMS

INSTALLATION PROCEDURES ARCHGARD DIRECT VENT (FLEX) SYSTEM

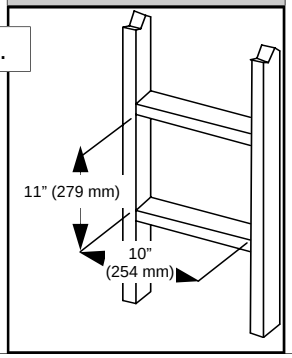
1. Place the Optima 70 in the framing. Locate the centerline of the termination and mark the wall. Cut an 11" x 10" (279mm x 254mm) hole in the wall. NOTE: a 2" (50mm) x 1-1/2" (13mm) around the 7" (178mm) liner is required. See Fig. 1 for termination framing.
2. Locate the Horizontal termination head and the 4" (101mm) flexible exhaust pipe, and "DRY" slip the exhaust pipe over the 4" (101mm) exhaust port on the termination head. Un-slip the "DRY" connection and apply high temperature sealant to the 4" (101mm) flexible exhaust port and reattach to the 4" (101mm) exhaust connection on the termination head and fasten with three screws on the pre-drilled locations. Repeat this same process with the 7" (178mm) flexible liner.
3. Locate the wall sleeve and cut to the thickness of the wall and slip it through the wall.
4. Locate the Firestop and secure in place with 4 screws.
5. Pull/Straighten the inner 4" (101mm) exhaust pipe to its maximum capacity and "wrap" the spring spacers at every change of direction. And every 3ft (914mm) if longer lengths of flexible liner is used. Next pull the 7" (178mm) intake liner over the 4" (101mm) exhaust liner. NOTE: take care when "pulling/stretching out the liners, inspect for "breaks" in the liners or in the termination head. Any "breaks in the venting system will cause poor flame and improper combustion.
6. Slip the assembled liner and termination head through the wall sleeve and make sure the termination cap faces up and fasten the termination head to the wall with 4 screws provided with the kit. NOTE: If installing the termination head to vinyl or wood siding a Vinyl Siding Deflector (VSD-1) is required. The VSD-1 must be set on top of the horizontal termination cap (fin side out) and then the two screws holding the termination cap are used to secure the termination head and VSD-1.
7. Apply high temperature sealant over the fireplace's inner exhaust collar and slip the 4" (101mm) inner flexible exhaust liner down over it and attach the connection with three screws.
8. Repeat with the 7" (178mm) liner.
9. Apply a bead of all weather silicone (not provided) around the termination head & house to prevent water from entering in.

NOTES:

- If installing a Vinyl Siding Deflector (VSD-1) attach the VSD-1 to the front top of the horizontal termination head "fin side out" to ensure the termination head is not recessed into the siding.
- Horizontal sections of pipe MUST be supported every 3' (914mm).
- Spacers shall be installed at every change of direction and every 3' (914mm) if using additional flexible pipe.

Termination Framing

Fig. 1.



NOTE: Be sure to include 1/4" (6mm) rise per foot of horizontal length.

IMPORTANT: Do not locate termination head where excessive snow or ice build up may occur. Check termination head area after every snow fall, and clear if necessary to prevent blockage. If using snow blowers, make sure snow is not directed at the termination head.

VENTING - HORIZONTALLY USING SIMPSON DURA-VENT DIRECT VENT SYSTEMS

The Optima 70 can be vented horizontally using Simpson Dura-Vent Direct Vent System. To vent using Simpson Dura-Vent exclusively, you must use the Archgard SDA-3 Adaptor and connect the SDA-3 adaptor to the top of the Optima 70 as shown in Fig. 1. NOTE: Apply high temperature sealant to the SDA-3 adaptor and the flue connection on the Optima 70. Seal all pipe joints and follow all venting instructions within this manual.
NOTE: Call your local Authorized Archgard Dealer to purchase Simpson Dura-Vent Direct Vent Kits and/or venting components.

Minimum components required for horizontal termination using Simpson Dura-Vent:

1 SDA-3 (Appliance adaptor)	1 90 Deg. Elbow
1 Horizontal Termination Cap	1 Wall Thimble
1 Length of pipe for top of appliance	1 Length of pipe to suit wall thickness

Measure wall thickness from the back of the fireplace standoffs to the inside mounting surface of the termination cap. If a Vinyl siding standoff is required, measure to the outside surface of the wall without siding and add 2" (50mm).
NOTE: The Termination cap must NOT be recessed into siding. Measure wall thickness including finishing straps.

Flat Wall Installation			
Wall Thickness (inches)	Vent Length Required (inches)	Wall Thickness (mm)	Vent Length Required (mm)
4" - 5-1/2"	6"	101 mm - 140 mm	152 mm
7" - 8-1/2"	9"	178 mm - 216 mm	228 mm
10" - 11-1/2"	12"	254 mm - 292 mm	305 mm
9" - 14-1/2"	11" - 14-5/8" Adj. Pipe	228 mm - 368 mm	228 mm - 371 mm
15" - 23-1/2	17" - 24" Adj. Pipe	381 mm - 597 mm	432 mm - 610 mm

Corner Installations			
Wall Thickness (inches)	Vent Length Required (inches)	Wall Thickness (mm)	Vent Length Required (mm)
3-1/4" - 6-3/4"	11" - 14-5/8" Adj. Pipe	82 mm - 171 mm	228 mm - 371 mm
7-3/4" - 16-1/4"	17" - 24" Adj. Pipe.	197 mm - 412 mm	432 mm - 610 mm
7-1/4" - 8-3/4"	6" + 12" Or 9" + 9"	184 mm - 222 mm	101 mm + 305 mm Or 228 mm + 228 mm
4-1/4" - 5-3/4"	6" + 9"	108 mm - 146 mm	152 mm - 228 mm

SIMPSON DURA-VENT DIRECT VENT PARTS LIST 6"-5/8" x 4" (168mm x 101mm)
See your Authorized Archgard Dealer for price and availability.

Part #	Description
971	Horiz. Term. Kit Includes; 90^0. Blk elbow, wall thimble cover, Horiz. square term. Cap, 24" (610 mm) blk pipe and 11"-14" (279 mm x 356 mm) adj. blk pipe.
970	Basic Horiz. Term. Kit Includes; 90^0. blk elbow, wall thimble cover, Horiz. square term. cap.
987	Vertical Termination Kit Includes; 0/12- 6/12 pitch adj. flashing, storm collar, low profile term. cap.
908B	6" (152 mm) Pipe Length - Black
907B	9" (228 mm) Pipe Length - Black
906	12" (305 mm) Pipe Length - Galv.
906B	12" (305 mm) Pipe Length - Black
904	24" (610 mm) Pipe Length - Galv.
904B	24" (610 mm) Pipe Length - Black
903	36" (914 mm) Pipe Length - Galv.
903B	36" (914 mm) Pipe Length - Black

Part #	Description
902	48" (1.22 M) Pipe Length - Galv.
902B	48" (1.22 M) Pipe Length - Black
911B	11" - 14-5/8" (228 mm x 371 mm) Adj. Pipe Length - Black
917B	17"' - 24" (432 mm) x (610mm) Adj. Pipe Length - Black
945	45^0 Elbow - Galv.
945B	45^0 Elbow - Black
945G	45^0 Elbow - Swivel - Galv.
945BG	45^0 Elbow - Swivel - Black
990	90^0 Elbow - Galv.
990B	90^0 Elbow - Black
990G	90^0 Elbow - Swivel - Galv.
990BG	90^0 Elbow - Swivel - Black
991	Vertical Termination Cap High Wind
980	Vertical Termination Cap

Part #	Description
984	Horizontal (Square) Termination Cap
985	Horiz. (SQ) Term. Cap. High Wind.
982	Snorkel - 14" (356 mm) Rise Term. Cap
981	Snorkel - 36" (914 mm) Rise Term. Cap
940	Wall Thimble - Support Box
941	Cathedral/Ceiling - Support Box
3951	Brass Trim for Wall Thimble/Ceiling Sup.
963	Firestop Spacer
943	Flashing 0/12 - 6/12
943S	Flashing 7/12 - 12/12
953	Storm Collar
950	Vinyl Siding Standoff
988	Wall Strap
942	Wall Thimble

VENTING - HORIZONTALLY USING SIMPSON DURA-VENT DIRECT VENT SYSTEMS

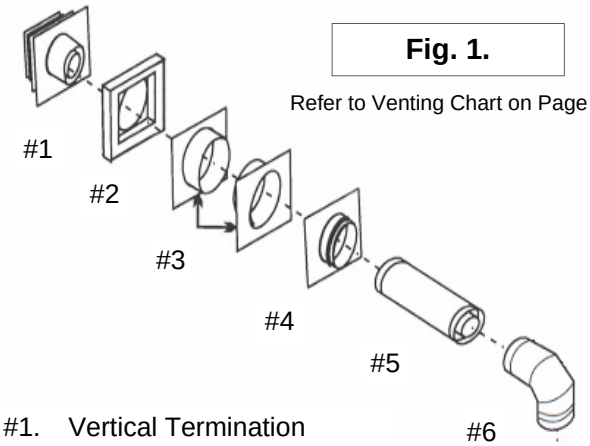
INSTALLATION PROCEDURES FOR SIMPSON DURA-VENT DIRECT VENT SYSTEM

1. Set the Optima 70 in its desired location. Determine if wall studs or roof rafters are in the way the when venting system is attached. You may want to adjust the location of the unit to compensate.
2. Simpson Dura-Vent Venting System is designed with special twist-lock connections to connect to the appliance. An Archgard adaptor (SDA-3) is required. The adaptor will allow Simpson Dura-Vent System to be used.
3. Apply a bead of silicone inside the outer section of the SDA-3 adaptor (crimped side). Slip the adaptor over the existing inner and outer flue collar and fasten it to the outer collar only with 3 screws (drill pilot holes first). Level the appliance and fasten it to the framing using nails or screws through the nailing strips.
4. Assemble the desired combination of pipe and elbows to the appliance adaptor and twist lock the pipe. NOTE: Twist-lock procedure: Four indentations, located on the female ends of the pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings by orientating the four pipe indentations so they match and slide in to the four entry slots on the male ends (Fig. 2.). Push the pipe sections completely together, then twist-lock one section clockwise approximately one quarter turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on the pipe or fittings. They may be located by examining the inside of the female ends. Horizontal vent runs MUST be supported every three feet (76 mm). Wall straps are available for this purpose.

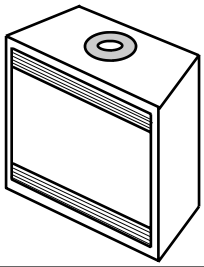
NOTE: Follow venting horizontal venting chart and Allowable Termination locations guidelines.

Fig. 1.

Refer to Venting Chart on Page 15



#1. Vertical Termination
#2. Vinyl Siding Standoff (Optional)
#3. Wall Thimble
#4. Round Support Box
#5. Adj. Length of pipe
#6. 90^0 Elbow
#7. Pipe Length
#8. SDA-3 Adaptor 3” (76 mm)



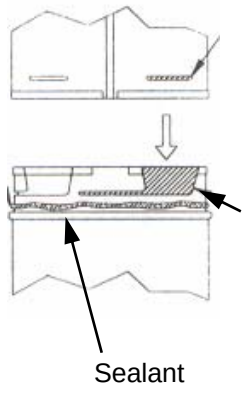


Fig. 2.

VENTING - HORIZONTALLY USING SIMPSON DURA-VENT DIRECT VENT SYSTEMS

INSTALLATION PROCEDURES FOR SIMPSON DURA-VENT DIRECT VENT SYSTEM

5. Mark the wall with an 11” (279mm) x 10” (254mm) hole. See termination framing on page 22. The center of the hole should line up with the centerline of the horizontal pipe. Cut and frame the 11” (279mm) x 10” (254mm) hole in the exterior wall where the vent will be terminated. If the wall being penetrated is constructed of non-combustible material, (i.e. a masonry block, or concrete) a hole with zero clearance is acceptable. NOTES: The horizontal run of vent must be level, or have a 1/4” (6 mm) rise for every 12” (305 mm) of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may present the possibility of a fire. ALSO: The location of the horizontal vent termination on an exterior wall must meet local and national building codes, and must not be blocked or obstructed. For Allowable Termination Locations see page 12 in this manual.
6. Position the Horizontal Vent Termination in the center of the square hole (arrow on the vent cap should be facing UP), and run a bead of non-hardening sealant around the outside edges of the termination, so as to make a seal between the termination and the wall. Finish attaching the termination cap to the wall with the four wood screws provided with the termination cap. NOTE: The four wood screws provided should be replaced with the appropriate fasteners for stucco, brick, concrete or other types of siding. For buildings with VINYL SIDING, a Vinyl Siding Standoff should be installed between the vent cap and the exterior wall. Attach the Vinyl Siding Standoff to the Horizontal Termination Cap by bolting the flat portion of the Vinyl Siding Standoff (Fig.1.) so that an air space will exist between the wall and the Vent Termination.
7. Locate and slide the Wall Thimble Cover over the vent pipe.
8. Slide the appliance and vent assembly towards the wall, carefully inserting the vent pipe into the vent cap assembly. It is important that the vent pipe extend into the vent cap sufficient distance so as to result in a minimum pipe overlap of 1-1/4” (31 mm). Secure the connection between the vent pipe and the vent cap by attaching the two sheet metal strips extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal screws provided to connect the strips to the pipe section. Bend any remaining portion of the sheet metal strip back towards the vent cap, so it will be concealed by the Wall Thimble Cover. (Fig. 2.)
9. Slide the Wall Thimble Cover up to the wall surface and attach to the wall with wood screws. (Fig. 3.)

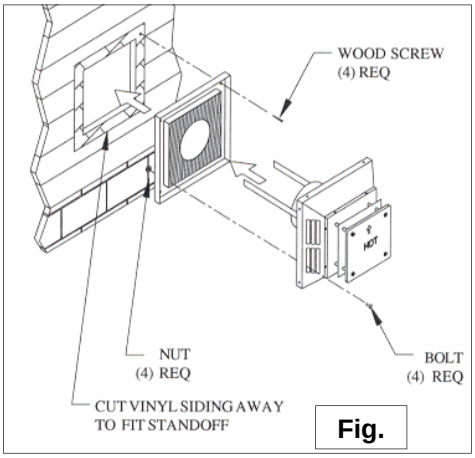


Fig.

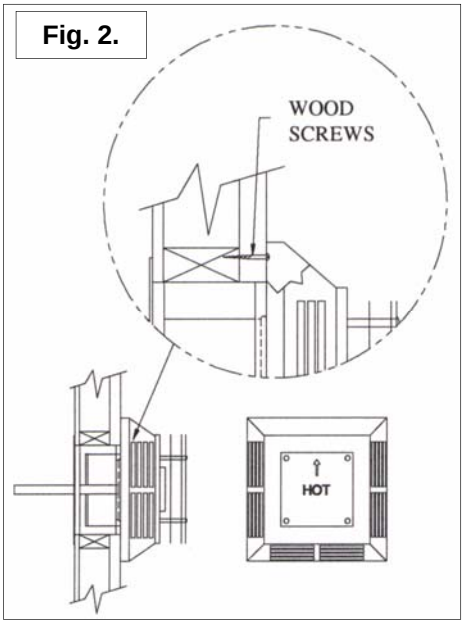


Fig. 2.

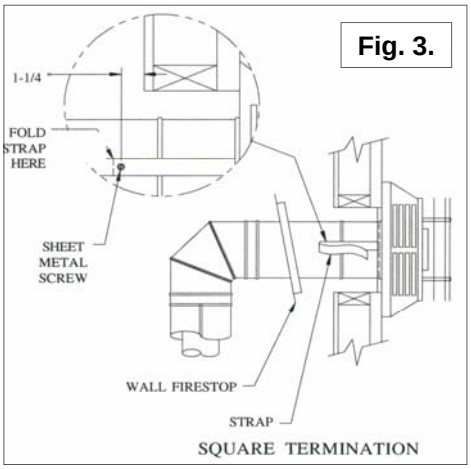


Fig. 3.

ELECTRICAL CONNECTIONS, FAN SYSTEM

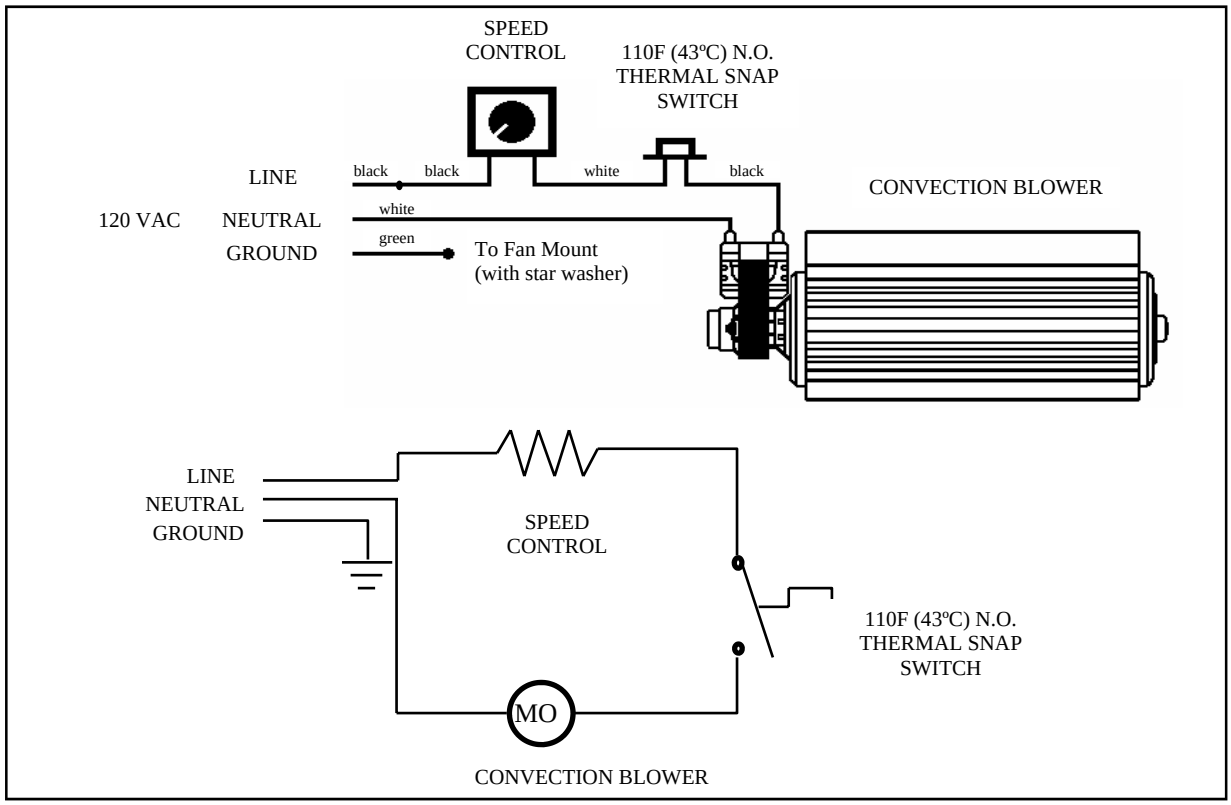
WARNING: Before starting make certain the power supply is turned off.

The Optima 70 comes complete with a temperature activated fan and rheostat installed and wired to an internal junction box. The heat sensor is factory set to close the circuit to the fan speed control at 110^0 F (43^0 C) and will turn off the fan when the temperature falls below 90^0 F (32^0 C).

Have a qualified electrician run a 120VAC supply line to the lower left side of the fireplace before installing the appliance. There should be 18" (460mm) of the supply line free for ease of connection to the appliance. Connect the electrical supply line to the appliance at the same time the gas line is being connected to the appliance.
NOTE: This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code, ANSI/NFPA 70**, or the **Canadian Electrical code, CSA C22.1.**

Open the bottom (louver) grill and undo the 2 screws holding the control panel. Run the line into the left side of the appliance through the hole in the rear of the junction box and hold with a standard 7/8" (22 mm) clamp. Connect the (black) supply conductor to the free black conductor from the speed controller with a marrette type wire connector. Connect the 'neutral' white supply conductor to the free white conductor from the fan with a marrette type wire connector. Connect the 'ground' (green or bare) conductor to the ground screw in the junction box. Replace the junction box cover and control panel and fasten with the 2 screws. A BX connector or other suitable approved wiring strain relief must be installed on the junction box.

WIRING DIAGRAM



LOG PLACEMENT

The Archgard “FiberFlame Technology Burner System” ceramic logs are designed to give a realistic fire package, and are created to look the same as the day they were originally installed. Care must be given when first installing the logs, and if removed for servicing, as they can be damaged or broken if not handled properly.

After opening the log set package, inspect the logs to ensure that no damage has occurred inside the package. Please report any damage immediately to your Authorized Archgard Dealer.

Gas and vent connection must be made before installing the logs on the “FiberFlame” bed.

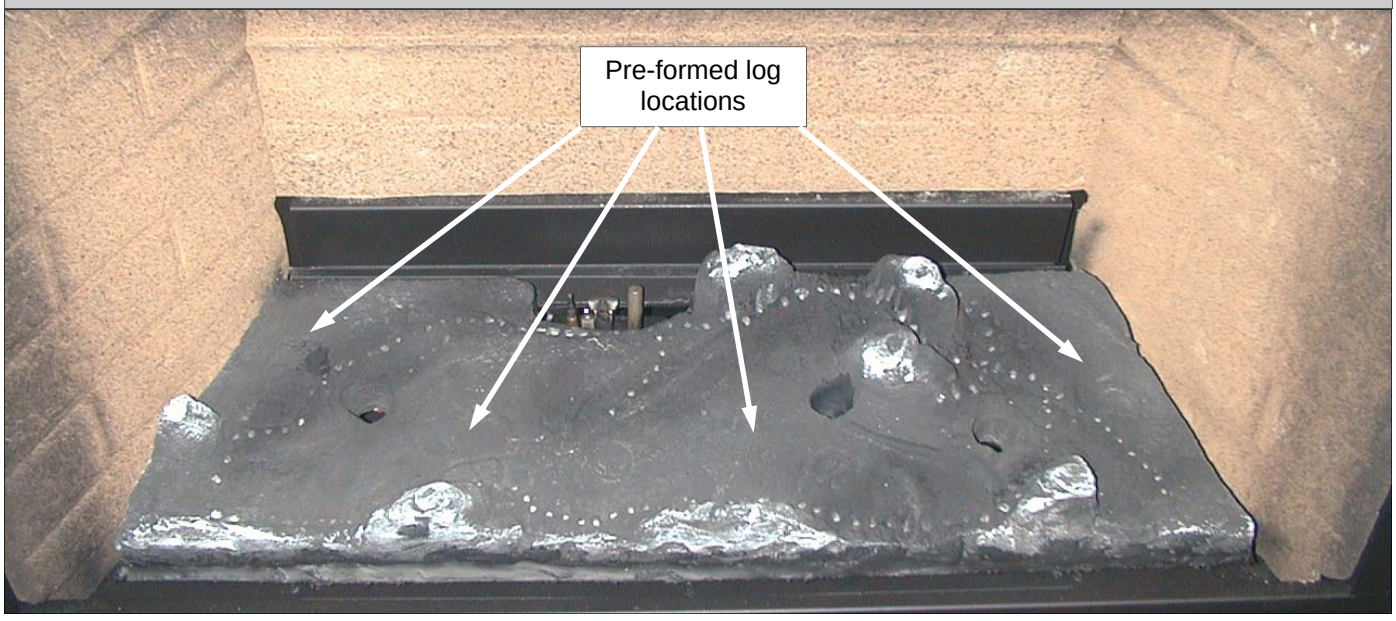
NOTE: Improper placement of logs may cause sooting on the internal parts and glass, and will not be covered under warranty. Do not use broken or damaged logs.

WARNING:
Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

The ember bed is pre-formed to accept the first four “base” logs. Locate the first four base logs, and place them on there perspective locations. Refer to the pictured instructions on the following pages that will show how to place all 7 (seven) logs. The bottom of each log has a 4 digit code that can be used as a reference to help locate the correct log.

IMPORTANT: DO NOT PLACE ANY LOGS OVERTOP OF THE BURNER “PORTS”.

FiberFlame Burner Bed

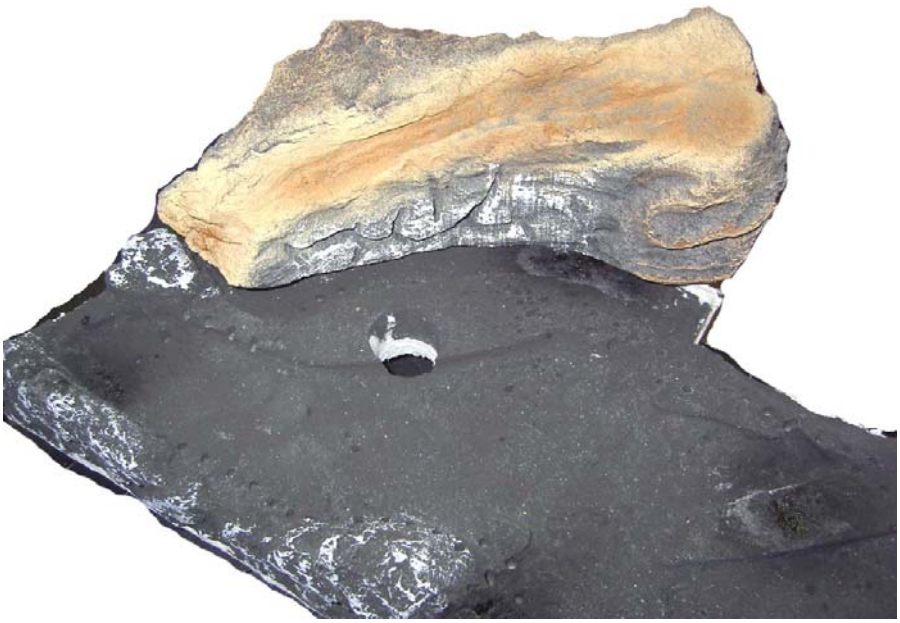


NOTE: Installing the “FiberFlame” Ceramic logs in any other position other than shown will result in flame impingement , causing sooting of the logs, brick liner and ceramic glass viewing area.

LOG PLACEMENT Continued…….

Step 1 :
Locate Log # 152 and place it as shown onto the Right Rear side of the Ember Bed as shown.

Step 2 :
Locate Log # 151 and place it as shown onto the Left Rear side of the Ember Bed as shown.



LOG PLACEMENT Continued…….

Step 3 :
Locate Log # 149 and place it as shown onto the Center Front of the Ember Bed as Shown.

Step 4 :
Locate Log # 150 and place it as shown onto the Left Front side of the Ember Bed as shown.

LOG PLACEMENT Continued…….

Step 5 :
Locate Log # 012 and place it as shown onto the Center Rear of the Ember Bed as Shown.

Step 6 :
Locate Log # 0013 and place it as shown onto the Right Front of the Ember Bed as Shown.

LOG PLACEMENT Continued…….

Logs placement should be as shown in the 3 diagrams below.

Step 7 :
Locate Log # 069 and place it as shown onto the Right Front of the
Ember Bed as Shown.

CERAMIC BRICK PANELS

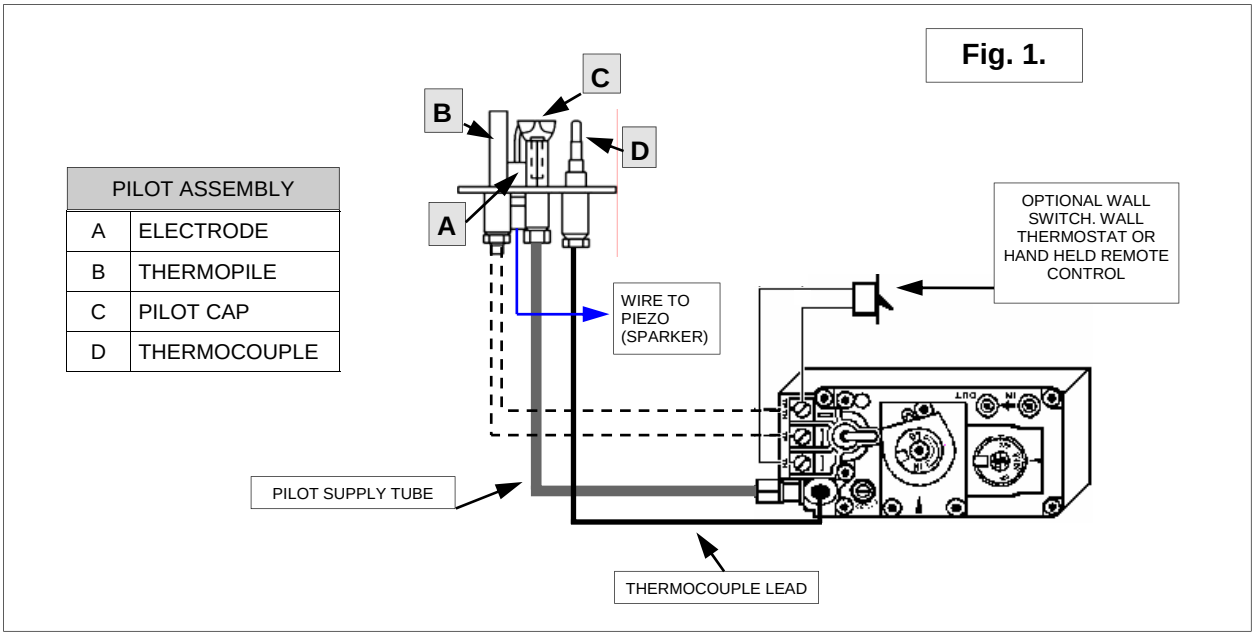
The Optima 70 comes with a set of Ceramic Brick Panels. They are factory-installed for your convenience, therefore no adjustments should be made. If you find any damage to the Ceramic Brick Panels, please contact the Authorized Archgard Dealer where you purchased this appliance, to order replacements.

OPTIONAL WALL SWITCH OR THERMOSTAT

If a wall mounted switch or a wall mounted thermostat is desired, Archgard recommends that the device be wired as shown in Fig 1.
Note: Archgard Industries does not manufacture, or sell, any wall switch or wall thermostat and will not extend warranty to them.

Thermostat / wall switch wire table Recommended Maximum Lead Length for two wire	
Wire Size	Max. Length
14 GA.	50 Ft. (15.24 M)
16 GA.	32 Ft. (9.75 M)
18 GA.	20 Ft. (6.09 M)
20 GA.	12 Ft. (3.65 M)
22 GA.	9 Ft. (2.74 M)

VALVE CONNECTION FOR MILLIVOLT VALVE



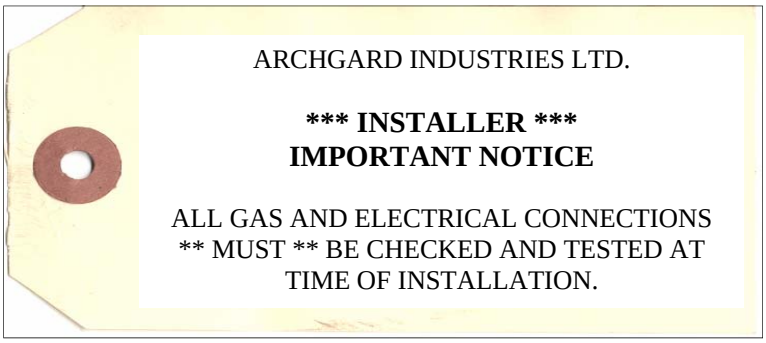
FINAL INSTALLATION CHECK

Each Archgard Gas Fireplace is checked and tested at the factory prior to being packaged, shipped to our dealers, and finally installed in your home. Archgard recommends that, before leaving this unit with the customer, the installer must ensure that the appliance is firing correctly, and that the electrical system is in working order. **This will include:**

1. Performing leak tests of supply line, gas control valve, supply line from gas control valve and pilot assembly.
2. Clocking the appliance to ensure the correct firing rate (see rating plate or page 6 of this manual).
3. If required, adjusting the primary air to burner to ensure that the flame does not carbon or soot. (see rating plate or page 6 of this manual)
4. Check for proper operation including correct drafting.
5. The FAN system should be turned ON for a minimum of 15 minutes to ensure the fan, rheostat and fan sensor are all working correctly. After the system has been checked, and confirmed that the fan components are in working order, turn the fan system OFF and refer to the instructions for FIRST FIRE located in this manual.

As a reminder, a TAG is attached to all of our gas fireplaces. This TAG is located at the gas control valve. (See Fig 1).

Fig 1.


ARCHGARD INDUSTRIES LTD.
*** INSTALLER ***
IMPORTANT NOTICE
ALL GAS AND ELECTRICAL CONNECTIONS
** MUST ** BE CHECKED AND TESTED AT
TIME OF INSTALLATION.

Any alteration to the product that causes carboning or sooting that results in any damage or requires cleaning is not the responsibility of the manufacturer.

INITIAL OPERATION

1. Check that the appliance is properly vented and connected to the gas supply.
2. Check that the logs and branches are properly placed.
3. Check that all external parts, such as grills, door and faceplate are properly attached and fastened.
4. Do not operate this appliance with broken or cracked glass doors or without the door (s) in its correct (and latched) position. Do not use abuse the glass by either striking or slamming shut.
5. Check that there are no finger prints left on gold surfaces or glass panels as high temperature can bake these prints permanently.

FIRST FIRE

When operated for the first few times, the appliance will emit some odor and fumes. This is due to the heat from the appliance evaporating the oils and solvents used in fabricating the appliance. Close off the room to the rest of the house and open all windows. Keep the room well ventilated as smoke alarm may sound. Run the appliance for at least 6 hours at maximum setting with blower set to “OFF” to allow paint to cure (after the installer has checked to ensure the fan is operational). Smoke and fumes caused by the curing process may cause discomfort to some individuals.

LIGHTING INSTRUCTIONS - CAUTION

WARNING : If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Do not operate the appliance with the glass front removed, cracked or broken. Replacement of broken glass should be done by a licensed or qualified service person.

This appliance has a pilot which must be ignited using the sparker located next to the appliance valve controls. When lighting the pilot, follow the start-up procedures **EXACTLY**. See next page or rating plate for complete lighting instructions.

1. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor, because some gases are heavier than air and will settle on the floor.
2. IF YOU SMELL GAS, follow the instructions on the front cover of this manual.
3. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don’t try to repair it. Call a qualified service technician. Force or attempted repair of gas control knob may result in a fire or explosion.
4. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS ON RATING PLATE

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire of explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by a spark ignitor. When lighting the pilot follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

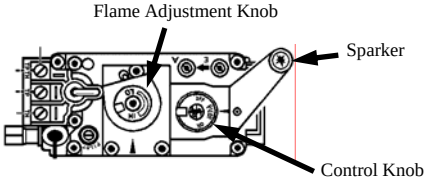
WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.

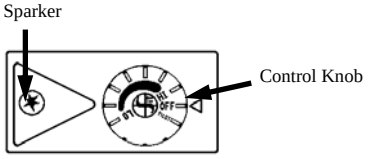
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Set the remote switch to "**OFF**". Set the thermostat to the lowest setting. (Only if your appliance is equipped with these devices.)
3. Turn off all electric power to the appliance.
4. Open lower louvers or access door.
3. Press slightly and turn the control knob clockwise ↻ to the "**OFF**" position.
4. Wait 5 minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! and follow instruction "**B**" above.
5. Find pilot. It is located between the logs near the center behind the burner.
6. Press slightly and turn control knob counterclockwise ↺ to "**PILOT**". Depress knob and light pilot by repeatedly pressing the sparker. Once flame is established, hold knob depressed for approximately 30 seconds. Release knob. If pilot should go out, repeat steps 3 to 5.
   - If the knob does not pop up when released, stop and immediately call your service technician or gas supplier.
   - If the pilot will not stay lit after serveral tries, turn the gas control knob to "**OFF**" and call your service technician or gas supplier.
7. If the appliance has a manual valve, turn gas control knob counterclockwise ↺ to the desired heat setting from "**LO**" to "**HI**". If the appliance has an automatic valve, turn gas control knob counterclockwise ↺ to "**ON**" and set the flame adjustment knob to the desired heat setting from "**LO**" to "**HI**".
8. Set the remote switch to "**ON**". Set the thermostat to the desired setting. (Only if your appliance is equipped with these devices.)
9. Turn on all electric power to the appliance.
10. Close louver or access door.



Automatic Valve



Manual Valve

Pilot

TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to the lowest setting and turn the remote switch to "**OFF**".
2. Turn off all electric power to the appliance if service is to be performed.
3. Open lower louvers or access door.
4. Press slightly and turn control knob clockwise ↻ to "**OFF**". Do not force.
5. Close lower louvers or access door.

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GLASS DOOR REMOVAL

WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person. Do not abuse the glass doors, such as striking or slamming shut.

WARNING: Do not attempt to remove the glass door when the appliance is hot.

1. Remove the top louver by pulling the entire louver assembly towards you.
2. Open bottom hinged louver .
3. Locate the 2 buckle latches under the door frame (Fig.1) and pull down the lever on the back of the latches to release them.
4. Unhook the latches from the bottom of the door and swing the bottom of the door towards you then lift up on the whole door to unhook the top of door. Carefully remove the door and put it away at a safe location where it cannot be scratched or damaged.

Replacing the Glass Door
Reverse the above procedure.

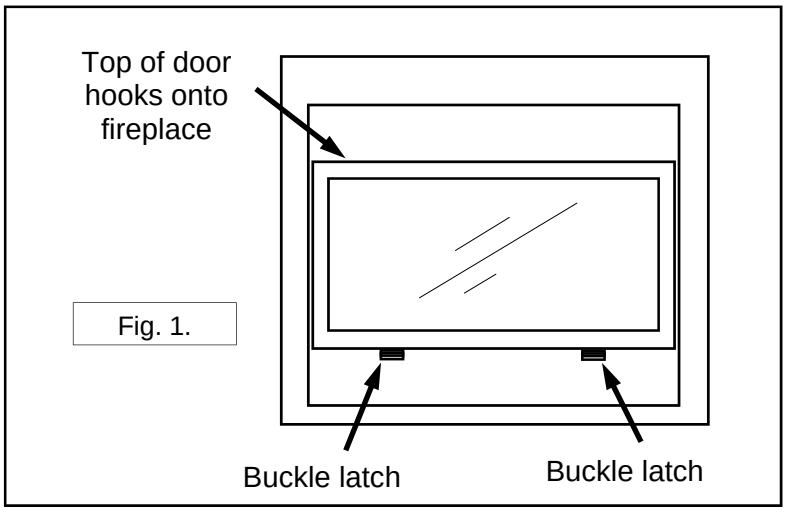


Fig. 1.

IF YOUR GLASS BREAKS

In the event your glass cracks or breaks, Archgard recommends that a new door assembly be ordered to replace the original door.

- Remove door as per the instructions above.
- Replace with new door assemblies.

NOTE: the NEW door will omit some odor when the appliance is re-lit and the odor will dissipate after the gasket material within the door has cured.

WARNING: Do not not substitute any glazing material types.

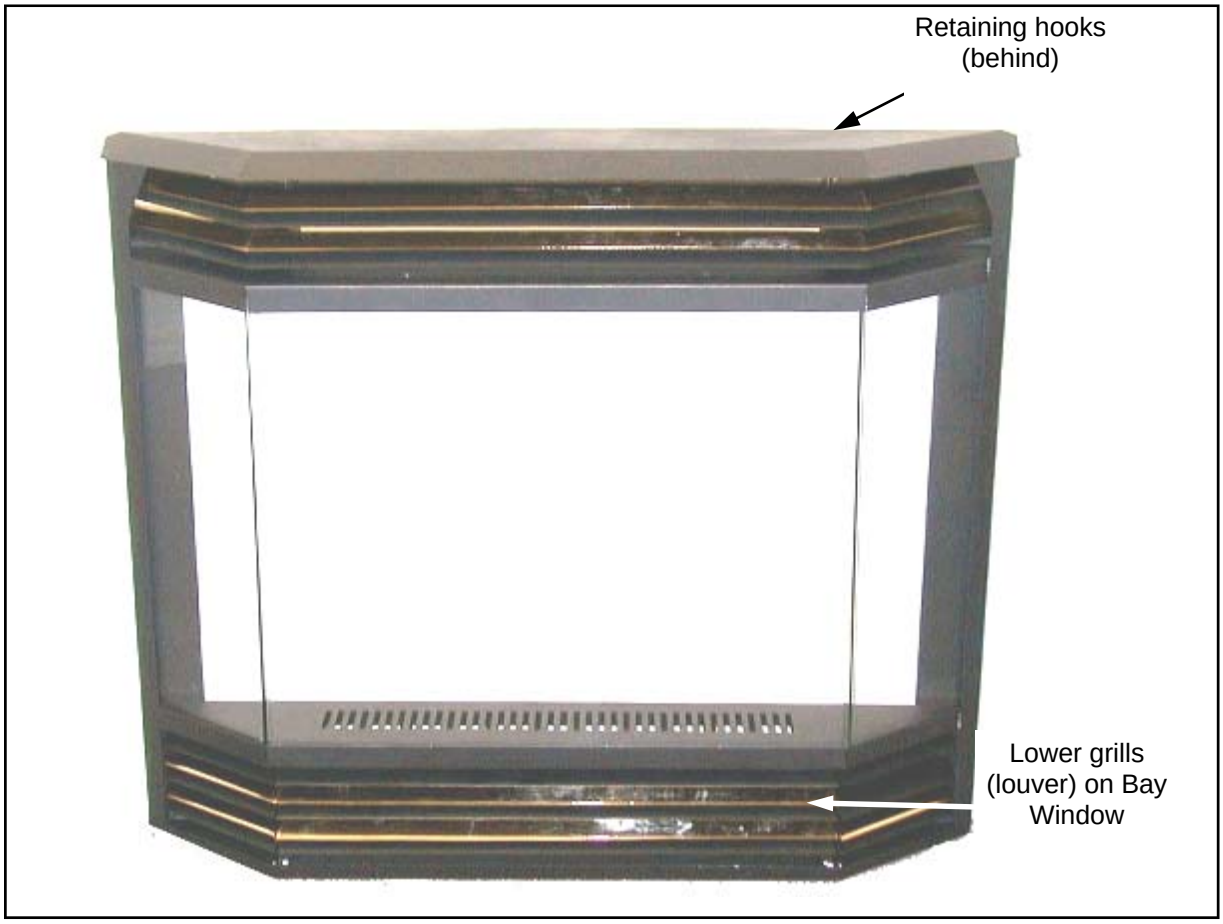
OPTIONAL BAY DOOR INSTALLATION

WARNING:
THE OPTIONAL BAY DOOR IS A DECORATIVE OPTION ONLY AND IS MANUFACTURED WITH TEMPERED GLASS. THIS UNIT MUST NOT BE OPERATED WITHOUT THE FLAT CERAMIC GLASS DOOR SECURED IN PLACE, BEHIND IT.

NOTE: Ensure that the fireplace is turned off and cool.

After opening the Bay Door package, inspect the bay door to ensure that no damage has occurred inside the package. Please report any damage immediately to your authorized Archgard Dealer.

1. If Louvers are on, remove the upper grilles (louver) by pulling the assembly forward.
2. If Louvers are on, Remove the lower grilles (louver) by removing the four hex head mounting screws.
3. Install the knob extensions on the valve.
4. Move the bay assembly over the front of the appliance, center it in front of the flat door and hang over existing door.
5. Wipe off any finger prints before turning on the appliance, so as not to etch the prints on to the bay louvers.



CAUTION:
Only Trim kit (s) supplied by the manufacture shall be used in the installation of this appliance.

OPTIONAL BAY WINDOW TRIM INSTALLATION

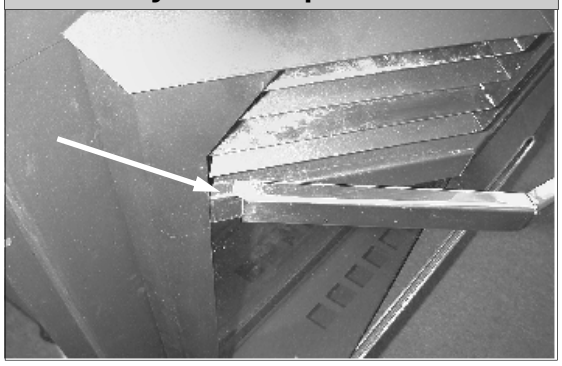
NOTE: Ensure that the fireplace is turned off and cool.

After opening the Bay Door package, inspect the bay door to ensure that no damage has occurred inside the package. Please report any damage immediately to your Authorized Dealer.

Installing the Gold window trim:

1. Remove the protective wrapping from one trim.
2. Place the end tab of the trim in behind the top left vertical post above the door.
3. Move the tab at the other end of the trim in behind the top right vertical post above the door.
4. Remove the protective wrapping from the other trim.
5. Similarly, place the tab of the trim in behind the bottom left vertical post below the door.
6. Move the tab at the other end of the trim in behind the bottom right vertical post below the door.
7. Wipe any finger prints before turning on the appliance, so as not to etch the prints onto the trims.

Bay trim tab placement



Place one magnet between door and trim

Securing trim with magnets

Top & Bottom Bay door strips installed

CAUTION:
Only Trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

LOUVER (UPPER & LOWER GRILLS) INSTALLATION

The Optima 70 is packaged without the upper and lower louvers (grills). They must be ordered separately. This is to allow you the option of black, black/gold, black/pewter louvers and all gold louvers.

After opening the louver package, inspect the upper and lower louvers to ensure that no damage has occurred inside the package. Please report any damage immediately to your Authorized Dealer.

Upper Louver installation.
1. Locate the Upper Louver. (Fig. 1)
2. Ensure the glass door is on the appliance.
3. Place the louver in the two catches located at the side of the appliance.

Lower Louver installation.
1. Locate the Lower Louver. (Fig. 1)
2. Locate the Hinges on the Lower Louver. (Fig. 2)
3. Locate the pre-drilled holes on the appliance. (Fig. 3)
4. Line up the hinges (on the louvers) and on the appliance and fasten the louvers with the 4 screws provide in the louver package. (Fig. 4)

Lower & Upper Louvers

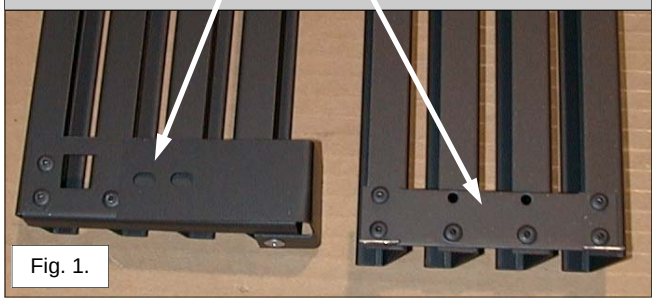


Fig. 1.

Lower Louver with Hinge

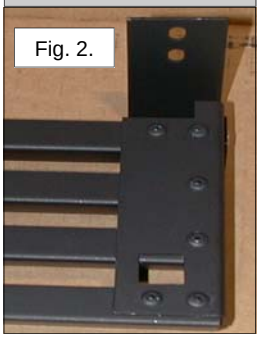


Fig. 2.

Pre-Drilled Hinge Holes

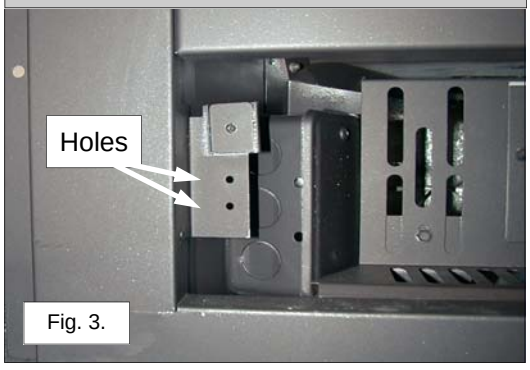


Fig. 3.

Bottom Hinged Louver

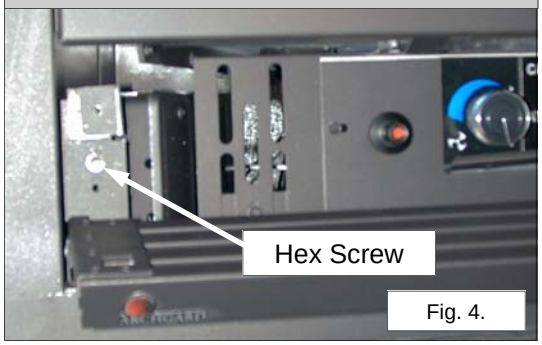


Fig. 4.

CAUTION:
Only Trim kit (s) supplied by the manufacturer shall be used in the installation of this appliance.

SURROUND KIT INSTALLATION

The Optima 70 can have an optional surround kit installed. After opening the surround kit package, inspect the product to ensure that no damage has occurred inside the package. Please report any damage immediately to your Authorized Dealer.

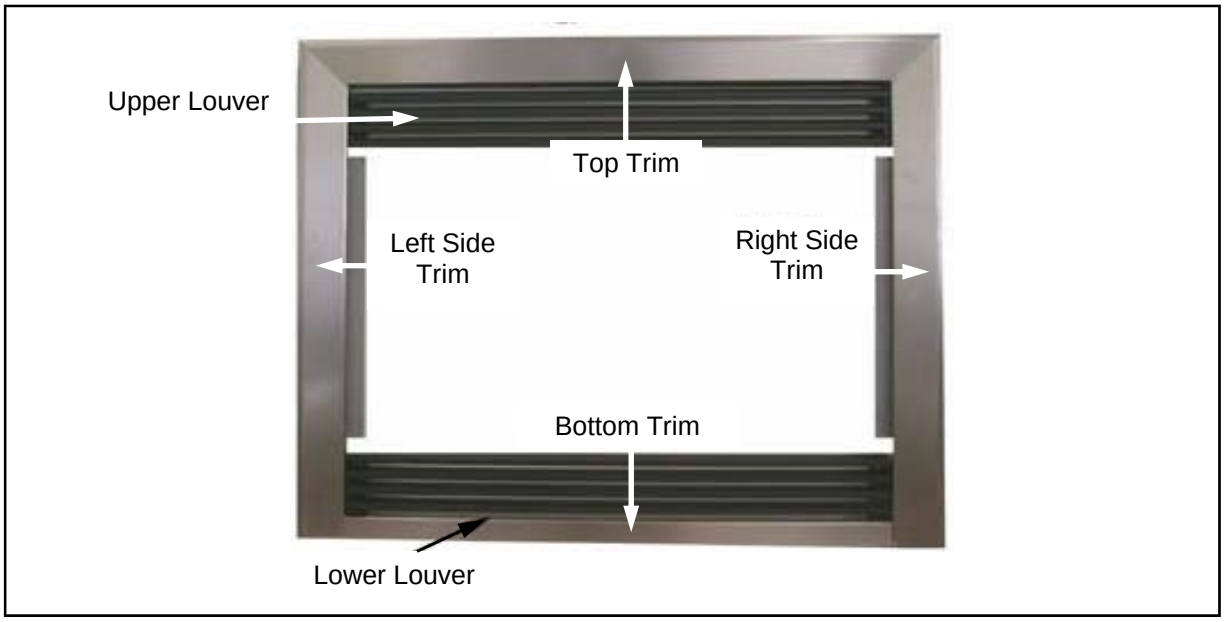
The optional surround kit will contain;

- (1) One Piece Bottom Trim.
- (2) Two Pieces, Left & Right Side Trims.
- (1) One Piece Top Trim.
- (2) 1/4" (6mm) hex head screws. (for use with the Euro 65) discard for the Optima 70.

Tools Required: 1/4" (6 mm) hex head hand screw driver.

NOTE: Before starting, remove the plastic film that protects the trim pieces. Wipe any finger prints before turning on the appliance, so as not to etch the prints on to the trims.

1. Remove the upper & lower louvers including the two lower hinges and set aside.
2. Place the bottom trim piece in position.
3. Remove the paper backing from the double sided tape that is on the back of the Left & Right trim pieces.
4. Remove 2 screws from under the fascia.
5. Firmly place the Left & Right side trim pieces into position.
6. Place the Top trim piece in place and use the two screws supplied to fasten the Top trim piece.
7. Replace upper louver.
8. Replace the lower louver.



CAUTION:
Only Trim kit (s) supplied by the manufacture shall be used in the installation of this appliance.

TROUBLE SHOOTING

Please check to make sure the instructions are followed exactly before attempting trouble shooting of the appliance.

WARNING: Trouble shooting and servicing of gas and electrical devices of the appliance should only be conducted by a qualified service technician.

SYMPTOM	ACTION
Pilot will not light after pressing the sparker many times.	1. When lighting the appliance for the first time after installation or after servicing, there is air in the gas line. It takes a while for all the air to purge out of the pilot before gas can reach the pilot and ignite. Remove the glass door and try lighting the pilot many times to purge the air. 2. Check to make sure the gas supply to the appliance is turned on and there is adequate gas supply pressure to the appliance. 3. Check for sparks between the spark electrode and the pilot head when the sparker is pressed. If there are no sparks, a. Check for broken or poor connection from the sparker to the electrode. b. Check for the spark shorting or arcing at other locations. c. Check for defective sparker. d. Check for defective spark electrode. 4. With the door removed, try lighting the pilot with a match. a. If air is blowing on the flame of the match, hold the control knob in at the '**PILOT**' setting until all the air is purged out of the line. b. If there is no gas or air coming out of the pilot and there is gas pressure to the appliance, the pilot orifice may be blocked or the gas valve may be defective.
Pilot will not remain on after being lit.	1. Press the control knob all the way in (at the "pilot" indicator). 2. Hold the control knob in for a longer period of time. 3. If you are trying to re-light the pilot immediately after you have shut-off the pilot, you have to wait 5 minutes for the valve to reset. (safety system built into the valve) 4. Check to see if the pilot flame is large enough to reach and surround the thermocouple. If the flame is too small, check for correct gas supply pressure. If pressure is good, adjust the pilot flame size with the adjustment screw on the valve. If the flame cannot be adjusted, there might be some debris obstructing the pilot orifice, or a wrong size pilot orifice. 5. Check for poor connection of the thermocouple to the valve. 6. Check for proper millivolts of the thermocouple. The thermocouple should generate at least 30 mV or it is defective. 7. Check for defective gas valve.
The main burner does not turn on with the pilot lit.	1. Check to make sure the control knob is turned to the '**ON**' position. 2. Allow enough time for the pilot to heat up the thermopile to generate sufficient voltage to activate the valve.

TROUBLE SHOOTING Cont...

SYMPTOM	ACTION
The main burner does not turn on with the pilot lit. Cont...	3. Check to make sure the thermostat is set high enough to turn on the appliance. 4. Check that the remote switch or the thermostat is turned on. 5. Check for weak pilot flame. If the flame is weak, check gas supply, check pilot flame adjustment and check for blockage of pilot orifice. 6. Check all connections to the valve for tight electrical contact. 7. Check for 400-500 mV from the thermopile with the burner off and 200-250 mV with the burner on. If the voltages are lower, the thermopile is defective. 8. Check for defective gas valve.
The main burner shuts off when the appliance is warm.	1. This may be the normal operation of a wall thermostat installed to appliances. 2. Check for good pilot flames on the thermopile. 3. Check for good voltage from the thermopile. 4. Check for proper functioning of venting system (blocked ?). 5. Check wire connections. Expansion from heat affects a loose connection.
Sooty deposits on the glass door.	1. If the flame is yellow and lazy, check for lint etc. around primary air shutter. Increase primary air by opening the primary air shutter if necessary. 2. Check for proper placement of the logs and branches. Ensure logs and burner are clean. See that section in the instruction manual. 3. Check for proper venting and blockage of the vent termination. 4. Check manifold pressure and clock input rating for over-firing.
Sharp blue flames with flames lifting off the burner at the ends.	1. Too much primary air. Reduce primary air by closing the primary air shutter. During cold temperatures, some flame lifting may occur during start-up.
Convection blower does not turn on.	1. The convection fan is thermostatically controlled. It will only turn on when the appliance is warmed-up. This may take up to 15 minutes with the appliance on high. 2. Check for 120 VAC electrical supply to the appliance. 3. Check for proper mounting of the thermal snap disc. 4. Check electrical connections. 5. Check for defective thermal snap disc. 6. Check for defective convection blower speed controller. 7. Check for defective convection blower.

MAINTENANCE

CAUTION:
Do not conduct maintenance on the appliance while it is operating or while it is still hot.

CLEANING THE APPLIANCE

The exterior painted surfaces, glass and gold trims may be cleaned with a soft, non-abrasive cloth and water or a suitable, mild, non-abrasive cleaner.

Regularly:

- Frequent cleaning of the ceramic glass is required. Archgard recommends using a good quality “gas fireplace” glass cleaner that is available at any hearth retail location. DO NOT CLEAN WHILE HOT.
- Clean and remove any lint accumulations or debris from the grills and in any combustion and convection air passage ways.
- Keep the appliance area free from combustible materials, such as paper, wood, clothing, gasoline and flammable solids, liquids and vapors.
- Visually check the height and color of the burner and pilot flames.

Every 2 to 3 months:

- Remove the glass door and clean the inside of the glass with a good quality “gas fireplace” glass cleaner. DO NOT CLEAN WHILE HOT.
- Carefully remove the logs and gently brush off any loose carbon deposits. This job is best done outside the house, wearing a dust mask.The logs are very fragile, take care not to break them. **Do not wash logs with any liquid.** While the logs are removed, check that all burner openings are not obstructed and it is recommended you use a vacuum cleaner to clean off any dust or lint.
- After cleaning, the logs must be replaced as per the instructions in this manual.

Once a Year have a qualified service technician:

- Completely inspect the appliance and the venting system, if the vent pipe or seal is found to be defective, replace and or reseal (follow the instructions found in the installation section) .
- Clean and remove any lint accumulations or debris in the firebox, on the burners, on the pilot, at the primary air opening, on the convection air blower and in any combustion and convection air passage ways.
- Check the safety system of the gas valve and the appliance.

WARNING : All parts removed or disturbed including guards and grills must be properly replaced after maintenance. Service and repair must be conducted by a qualified service person. If these instructions are not followed, a fire or explosion may result, causing property damage, personal injury or loss of life.

SERVICING UNDER WARRANTY

Before servicing, read the terms and conditions of the Archgard warranty at the back of the manual. Contact the Authorized Archgard dealer were you purchased the appliance from and provide them with details of the problem together with the initial installation information (from the back of this manual).

WARNING: Servicing of this appliance **must be conducted by a qualified service technician**. Improper servicing, adjustment or alteration of this appliance may cause property damage, personal injury or loss of life. All servicing should be conducted with the appliance cold. All replacement parts must be authorized by Archgard for suitability.

ADJUSTING PRIMARY AIR

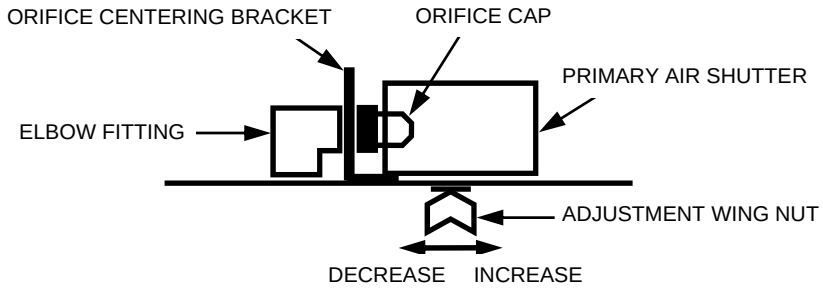
Caution: Wear gloves when adjusting the primary air with the appliance hot.
Note: the Shutter is set at the factory and normally only requires resetting at higher altitudes.

1. Open the lower louver.
2. Unscrew the 2 screws holding the control panel and remove the panel. (Fig. 1)
3. The primary air adjustment wing nut is located behind and to the left of the control valve.
4. Loosen the wing nut and slide the primary air shutter to the right to increase primary air and to left to reduce primary air.
5. Tighten the wing nut after adjustment.

Control Panel

Fig. 1.

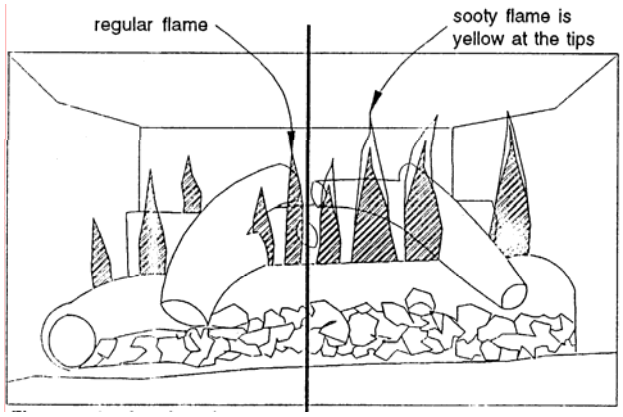
Air Shutter (side view)



ADJUSTING PRIMARY AIR

NOTE: (Fig. 1) is to give an example of what is a correct and incorrect flame pattern. It is not a true representation of what your Optima 70 will look like in the customer's home environment.

Fig.1



FLAMES...

The left side shows correct adjustment. The right side shows yellow sooty flames requiring increase in shutter opening or cleaning of shutter area due to lint buildup.

CHANGING MAIN BURNER ORIFICE

1. Remove the glass door. Follow GLASS DOOR REMOVAL instructions within this manual.
2. Locate & slide the Primary Air Sleeve fully toward the left. This will allow the sleeve to disconnect from the burner tube. Follow ADJUSTING PRIMARY AIR instructions within this manual for reassembly.
3. Remove the logs from the FiberFlame bed. See LOG PLACEMENT for instructions.
4. Unscrew the two mounting screws that are located at the back rear of the ember bed.
5. Carefully remove the ember bed by using your index finger's in the holes and carefully lift the ember bed (burner) out.
6. Use a 1/2" (13 mm) wrench to remove the orifice cap.
7. Change the orifice cap to the fuel type desired. Use a small quantity of gas thread seal compound. Do not over tighten.
8. Reverse steps 6 to 1.

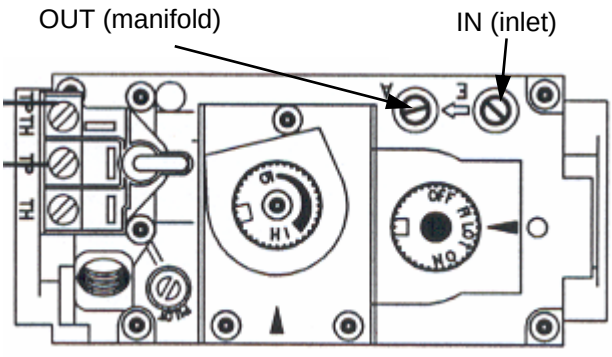
WARNING when replacing the ember bed using the two screws, you MUST not over tighten the screws. Leave the screws "FINGER" tight allowing the ember bed to "float". This is required for expansion & contraction of the ember bed.

THIS APPLIANCE IS EQUIPPED FOR NATURAL (LP/PROPANE) GAS. Included with the OWNERS MANUAL, a (LP/propane) main burner orifice is supplied. An additional CONVERSION kit is required to complete the fuel conversion. To order the CONVERSION kit please contact your Authorized Archgard Dealer or Archgard to purchase the CONVERSION kit.

CHECKING INLET AND OUTLET GAS PRESSURE

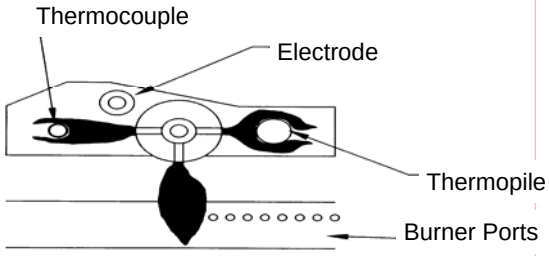
1. Open the lower grills (louvers).
2. The pressure test taps are located on the valve. The taps are located in the gas valve front face. The inlet is marked '**IN**' and the outlet is marked '**OUT**'. See Fig.1.
3. Loosen the set screw inside the tap with a 1/8" (3 mm) wide flat screw driver.
4. Connect a 1/4" (6 mm) rubber tube to the tap post and a manometer.
5. Verify the readings obtained are within specs (as shown on the appliance rating plate)
6. Be sure to tighten the set screw inside the tap after you are finish taking pressure readings.
7. Check for leaks.

Fig. 1.



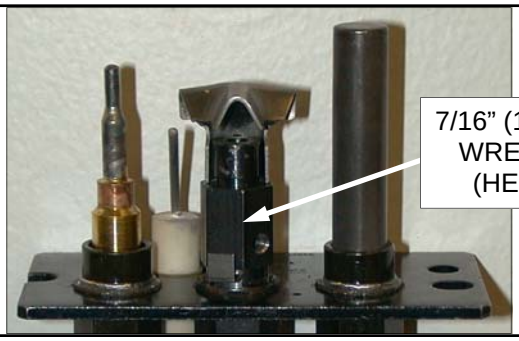
CHECKING AND ADJUSTING PILOT

The pilot flame should have the characteristic as shown in the illustration below. The flame should not have yellow tips but should engulf the thermocouple and thermopile. It can be adjusted be turning the screw marked "pilot" on the control valve.



CONVERTIBLE PILOT ORIFICE

The pilot assembly is convertible to the type of gas being used, simply unscrew the body by using a 7/16" (11 mm) wrench turn a 1/4 open then push the small metal tab across to the other side of the body and retighten. **Call your local Authorized Archgard Dealer to purchase the correct fuel conversion kit for your gas appliance.**



REPLACING CONVECTION BLOWER

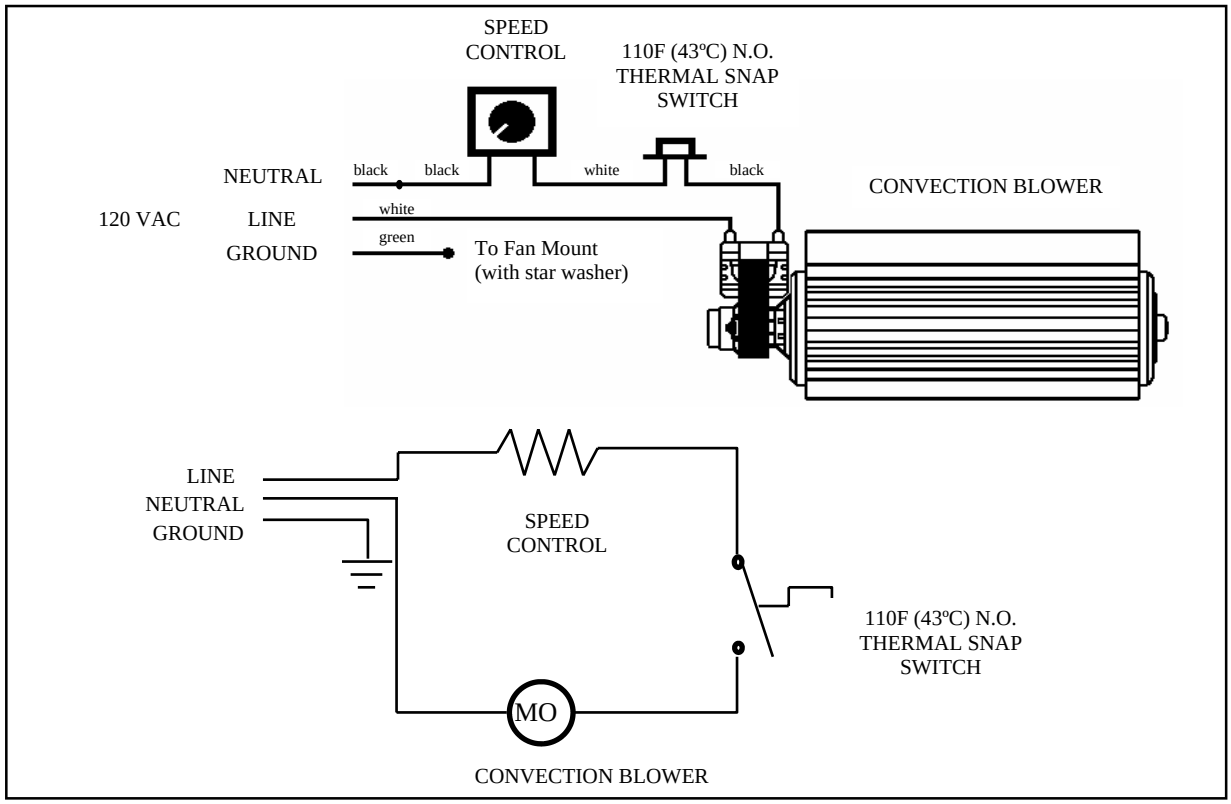
Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.
This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code, ANSI/NFPA 70**, or the **Canadian Electrical code, CSA C22.1.**

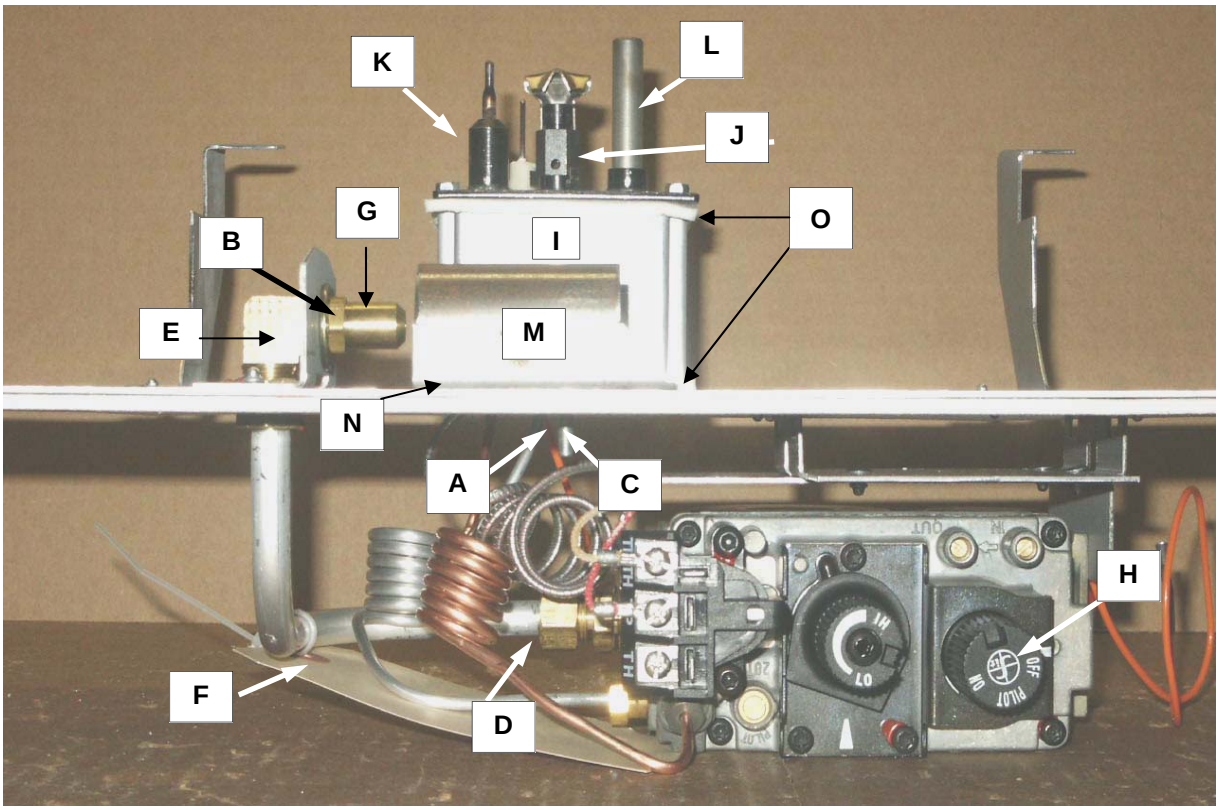
NOTES:

- Ensure that the main power and breaker system is turned OFF before removing the fan.
- Make sure the fireplace has been turned off and is cool to the touch.
- Mark all wires to be removed for proper reassembly.
- **CAUTION:** Wiring errors cause improper and dangerous operation.

1. The convection blower is located at the bottom of the appliance at the back. Loosen the three screws holding the blower.
2. Lift the blower out and disconnect the wires from the blower.
3. Repeat above steps to install new fan.

WIRING DIAGRAM

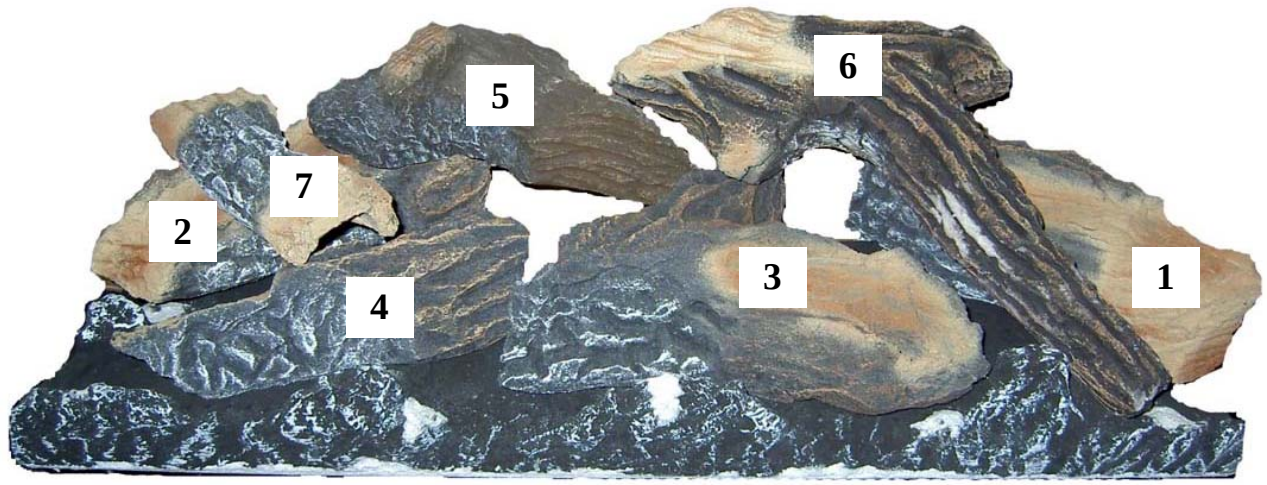




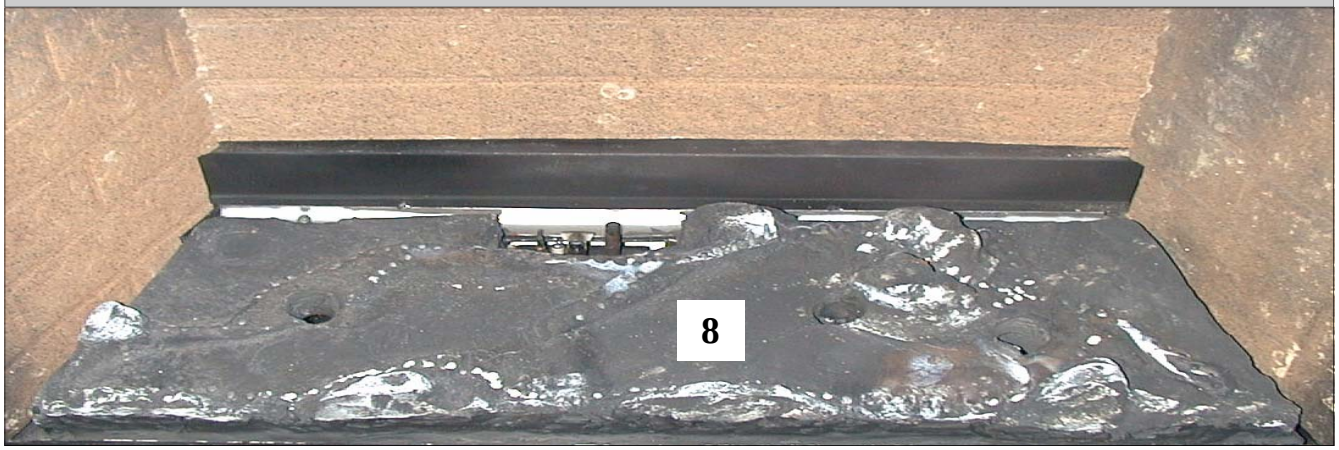
	Item #	Item Description	Qty	Unit
A	300-0021	Washer, SAE Zinc Plated, Flat	1	EA
B	300-0061	Washer, 3/8” (9.5 mm) SAE Grade 8, Flat	1	EA
C	308-0120	Wing Nut, Plated Steel (AIR Shutter)	1	EA
D	301-0000	Straight 3/8” (9.5 mm) Compression 3/8” (9.5 mm) MNPT	1	EA
E	301-0001	Elbow 3/8” (9.5 mm) Compression 90 deg. 1/8” (3 mm) MNPT	1	EA
F	301-0009	Tubing 3/8” (9.5 mm) Dia. Aluminum (Main Supply Tube)	9	IN
G	301-0068	Orifice (Main Burner Orifice) Drill to # 37 DMS (2.65 mm) for Natural Gas and Drill to #52 DMS (1.62 mm) or Propane	1	EA
H	308-0013	Valve NOVA SIT 820 (0.820.652) Natural Gas	1	EA
I	713-2006	Pilot Assembly Box	1	EA
J	308-0093	Pilot Assembly. Convertible NG/LP Base Mount. Includes the items listed below…...	1	EA
K		Part # 308-0057 - Thermocouple	1	EA
L		Part # 308-0056 - Thermopile	1	EA
M	800-0070	Air Shutter Assembly	1	EA
N	314-0131	Air Shutter Gasket	1	EA
O	314-0127	Pilot Assembly Box Gasket	2	EA
	813-0202	Complete Valve Tray Assembly (813-0203 lpg)	1	EA

PARTS LIST - FiberFlame Logs and Burner Bed

#’s shown in sequence of installation steps.
Please review pg.26 to pg.29 in this manual.



FiberFlame Burner Bed



Item #	Item Description	Qty	Unit
310-0152	FiberFlame Log # 1.	1	EA
310-0151	FiberFlame Log # 2.	1	EA
310-0149	FiberFlame Log # 3.	1	EA
310-0150	FiberFlame Log # 4.	1	EA
310-0012	FiberFlame Log # 5.	1	EA
310-0013	FiberFlame Log # 6.	1	EA
310-0069	FiberFlame Log # 7.	1	EA
813-0051	FiberFlame Burner #8	1	EA

REPLACEMENT PARTS LIST ARCHGARD OPTIMA 70

Item #	Item Description	Qty	Unit
200-0162	Owners Manual	1	EA
300-0031	Magnet Pull (holds bottom louver)	2	EA
300-0034	Catch, Door Latch. (Buckle for door)	2	EA
308-0005	Piezo Igniter Only	1	EA
700-0140	Vent Restrictor #1	1	EA
700-0141	Vent Restrictor #2	1	EA
308-0046	Knob Extension - ON/OFF 1-/12” (62 mm)	1	EA
308-0047	Knob Extension - HI/LOW 1-1/2” (62 mm)	1	EA
	Fan Components		
305-0013	Fan - Speed Control (Rheostat)	1	EA
305-0017	Fan - Junction Box Cover Plate	1	EA
305-0018	Fan - Junction Box	1	EA
305-0021	Fan - Thermodisc (fan sensor) 110^0 F. (43^0 Celsius)	1	EA
305-0024	Fan - Fan with motor and blades. 120VAC, 115V, 24watt (QLN65-0018)	1	EA
702-0047	Fan - Thermodisc mounting bracket	1	EA
702-0050	Fan - Fan Heat Shield	1	EA
	Flat Glass Door		
813-0076	Complete Replacement Door. Includes, glass, gasket and door frame	1	EA
	Ceramic Brick		
311-0017	Ceramic Brick Liner - Right Side	1	EA
311-0018	Ceramic Brick Liner - Left Side	1	EA
311-0060	Ceramic Brick Liner - Rear	1	EA
702-0044	Brick Panel Clips	2	EA
	Replacement parts for BBAY-70 Bay Door		
300-0031	Magnet Pull	2	EA
307-0030	Glass, 6mm Tempered (Middle Piece)	1	EA
307-0031	Glass, 6mm Temp (Side Piece)	2	EA
308-0048	Knob Ext. ON/OFF 2-1/2” (63 mm)	1	EA
308-0049	Knob Ext. HI/LOW 2-1/2” (63 mm)	1	EA
314-0006	Gasket Flat	72	IN

ARCHGARD LIMITED WARRANTY

This Limited Warranty is made by ARCHGARD INDUSTRIES LTD., hereinafter referred to as “Archgard”. Archgard warrants to the original purchaser of an Archgard gas burning fireplace (s) that the product will be free of defects in materials and workmanship under normal use and service, for a “lifetime”.

INCLUSIONS: “LIFETIME LIMITED WARRANTY“

- All heat exchangers, combustion chamber, burner tubes and pans.
- Ceramic Fiber Logs and Ceramic Brick Panels against splitting or cracking.
- Ceramic Glass against thermal breakage.
- All 24 K gold trims and accessories against tarnishing.
- All trim accessories against tarnishing and paint defects.
- NOTE: Discoloration and some minor movement of certain parts are normal and are not a defect and therefore, not covered under warranty.

The above will be covered “parts & labor” to the original purchaser for FIVE years and “parts” only thereafter from original date of purchase.

INCLUSIONS: “FIVE YEAR LIMITED WARRANTY”

- Five year limited warranty on the “FiberFlame Technology Burner System.” Warranty will cover any defective burner and ceramic ember bed if defect is deemed as original by the manufacturer.

The above will be covered “parts & labor” to the original purchaser for TWO years and “parts” only thereafter from original date of purchase.

INCLUSIONS: “ONE YEAR LIMITED WARRANTY”

- Blowers, fans and fan motors, wiring, rheostats and thermodiscs.
- Rocker switches, spill switches and wiring to them.
- Gas control valves, pilot assemblies including thermopiles, thermocouples, electrodes, and igniters.

The above will be covered “parts & labor” to the original purchaser for ONE year from date of purchase.

EXCLUSIONS:

- Archgard does not offer wall mounted thermostats, programmable thermostats (wiring for hook-up of said product), handheld remote controls, fireplace mantel (s), trims or tiles.
- Ember Material.
- Tempered Glass is warranty for ONE year to the original purchaser from date of purchase.
- Travel time or mileage to original purchasers residence. Archgard suggests that you pre-arrange travel expenses with your Authorized Archgard Dealer.

WHAT TO DO IN THE EVENT OF A PROBLEM:

- Thoroughly read your manual.
- If you cannot solve the problem, contact your Archgard Dealer or representative.
- When calling for help please have the following information:

  Model of your Fireplace **Serial Number** **Place of Purchase**
  Date of Purchase **Problem Description**

- NOTE: Warranty may be void if work is carried out by an unqualified person (s). Only original Archgard parts may be used. Please consult your Archgard dealer or representative if in doubt about a replacement part (s).

OBTAINING WARRANTY SERVICE:
To obtain warranty service, the original purchaser shall return the defective part (s) to the original authorized Archgard selling dealer transportation prepaid, along with the serial number of the appliance and proof of purchase. Any defective part, in our judgment, will be repaired or replaced at Archgard’s discretion. The dealer must obtain approval from Archgard before any repairs are made.

WARRANTY LIMITATION:
THIS LIMITED WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED AS TO QUALITY, MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

The appliance is only warranted for the use as intended by the installation and operating instruction and local building codes. The warranty will not cover damage due to accident, misuse, abuse, alteration, improper installation or “Acts Of God”.
This limited warranty is void unless the appliance is installed by a qualified installer, in accordance with the instructions furnished with the appliance. Some Provinces or States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to the original purchaser. Any damage resulting from defects in this product, is limited to the replacement of the defective part (s) and does not include incidental and consequential exposures sustained in connection with the product. This includes facing (s), mantle (s), cabinet (s), tile (s) or any other finishes resulting from removal of any gas appliance. This warranty is limited to residential use only and gives the consumer specific rights. These rights may vary from State to State or Province to Province.

Frequently asked questions

Listed below are some frequently asked questions regarding your Archgard Gas Fireplace. If you have questions that are not listed below, or are not answered in this manual, please contact your Authorized Archgard Dealer.

Q. My glass has a condensation “fog” when the appliance is first lit.
A. Condensation is normal and will disappear in a few minutes after the glass is heated.

Q. I have a white “film” on my glass. What is the best way to clean the inside of the glass.
A. Frequent cleaning of your glass is recommended. Archgard recommends using a good quality “gas fireplace” glass cleaner that is available at all authorized dealers. Do not use abrasive materials, and do not clean the glass or the appliance when the unit is hot.

Q. How do I care for my gold plated trims.
A. Archgard recommends a cleaning with a damp cloth. DO NOT use chemical cleaners as they may harm the finish, and void your warranty. NOTE: If the top louvers, or top overlay starts to discolor, check the door gasket seal and replace if necessary.

Q. My fan/blower makes a “whirring” or “humming” noise.
A. Your Archgard gas appliance uses a powerful fan to push heated air into your room. It is not unusual to hear a “humming” noise when your fan is running. Note: the sound will change depending on the setting that your fan speed control is set at.

Q. I hear a “click” when my fan system activates.
A. When your appliance reaches temperature, it will activate the THERMODISC “fan switch”. The switch closes the electrical circuit that allows the fan to turn on. This is a normal sound.

Q. I hear a “ticking”, “cracking” or “pinging” sound when my fireplace is running, and after it is turned off.
A. The different gauges of steel used to manufacture your fireplace will expand and contract at different rates when your fireplace is on, and will continued as your fireplace completes its heating function. You will likely hear these same sounds more on start up and shut down. This is normal for steel fireplaces.

Q. When my appliance is OFF and my pilot light is lit, I hear a “whisper” sound.
A. The lit pilot can make a small noise. Sometimes in extreme wind conditions you may be able to hear air entering into the firebox chamber.

Q. I hear a “click" when my main burner turns ON or OFF.
A. Your Gas Control Valve will make a clicking sound when it opens to allow gas to flow to the main burner. This is a normal part of the operating system.

Q. Can I burn wood and other materials in my gas fireplace.
A. No! Burning anything other than natural or LP gas in a gas fireplace or stove will create a potential fire hazard and present a danger to your home and its occupants. Only burn the gas fuel for which the unit was originally designed.

Q. Can I shut my pilot off in the summer?
A. You will save energy by turning off the pilot light if you are not using your appliance for the hot summer months. Remember to relight it before you want to use the appliance for the first time in the fall. Refer to your owners manual for lighting instructions.

Q. Can I position my gas logs in a different fashion or use a different log set?
A. No. Your gas fireplace is an engineered system that includes the firebox, burner, logs, venting and options which are tested and listed by CSA. Changing any specifications or placement of the logs could void your manufacturer's warranty, and possible even your homeowner's warranty.

CUT ALONG LINE

POSTAGE

WARRANTY REGISTRATION

ARCHGARD INDUSTRIES LTD.
7116 BEATTY DRIVE
MISSION, B.C. CANADA
V2V 6B4

FOLD DOWN AT LINE

CUT ALONG LINE

FOLD DOWN AT LINE & TAPE CLOSED

CUT ALONG LINE

Model # : OPTIMA 70 - 2 Serial #: _____ Date Installed: _____ / _____ / _____
mm dd yyyy

Name: _____ Address: _____

City: _____ State/Prov: _____ ZIP: _____ Phone: (_____) _____

Dealer's Name & Address: _____

City: _____ State/Prov: _____ ZIP: _____ Phone: (_____) _____

Installer's Name & Address: _____

City: _____ State/Prov: _____ ZIP: _____ Phone: (_____) _____

Why did you choose this product? _____

_____

Thank you for purchasing our product and filling out this warranty card.

Archgard Industries Ltd.
7116 Beatty Drive
Mission, B.C. V2V 6B4
Canada

Website: www.archgard.com